



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

WOMEN WITH MAMMOGRAPHIC CHANGES: JOURNEY ON A BASIC HEALTH UNIT

MULHERES COM ALTERAÇÕES MAMOGRÁFICAS: TRAJETÓRIA EM UMA UNIDADE BÁSICA DE SAÚDE

MUJERES CON ALTERACIONES MAMOGRÁFICAS: TRAYECTORIA EN UNA UNIDAD BÁSICA DE SALUD

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ABSTRACT

Objective: to describe the journey of users of a Basic Health Unit (BHU) that presented abnormal mammogram results. **Method:** descriptive study conducted in a sample of 20 women with abnormal mammograms among the 664 who underwent this examination from January 2013 to June 2014 in a BHU in southeastern São Paulo (SP), Brazil. **Results:** twelve women had BI-RADS[®]0 mammographic results; five had BI-RADS[®]3 results, and three, BI-RADS[®]4. Among them, three were diagnosed with cancer and during follow-up two did not return for consultation. The time between the exams, referral to breast cancer specialist, biopsy and treatment varied from 1 to 3 months in each step. Initiation of treatment occurred after 1 to 3 months of diagnosis. **Conclusion:** there is need for more effective control to reduce the waiting time for consultations or referrals in order to allow less aggressive treatments and increase the chances of cure. **Descriptors:** Breast Neoplasm; Delivery of Health Care; Primary Health Care.

RESUMO

Objetivo: descrever a trajetória de usuárias de uma Unidade Básica de Saúde (UBS) que apresentaram mamografia alterada. **Método:** estudo descritivo, realizado em amostra de 20 mulheres com mamografia alterada, dentre as 664 que realizaram esse exame de janeiro de 2013 a junho de 2014, em uma UBS da região Sudeste do município de São Paulo (SP), Brasil. **Resultados:** 12 mulheres apresentaram resultado mamográfico BI-RADS[®]0; cinco BI-RADS[®]3 e três BI-RADS[®]4. Delas, três tiveram diagnóstico de câncer e, no seguimento, duas não retornaram para consulta. O tempo transcorrido entre a realização dos exames, encaminhamento ao mastologista, biópsia e tratamento variou de 1 a 3 meses em cada etapa. O início do tratamento deu-se após 1 a 3 meses do diagnóstico. **Conclusão:** há necessidade de controle mais eficaz para diminuir o tempo de espera para consultas ou encaminhamentos a fim de possibilitar tratamentos menos agressivos e aumentar as chances de cura. **Descritores:** Neoplasias da Mama; Assistência à Saúde; Atenção Primária à Saúde.

RESUMEN

Objetivo: describir la trayectoria de usuarias de una Unidad Básica de Salud (UBS) que presentaron mamografía alterada. **Método:** estudio descriptivo, realizado en muestra de 20 mujeres con mamografía alterada, entre las 664 que realizaron ese examen de enero de 2013 a junio de 2014, en una UBS de la región Sudeste del municipio de São Paulo (SP), Brasil. **Resultados:** 12 mujeres presentaron resultado mamográfico BI-RADS[®]0; cinco BI-RADS[®]3 y tres BI-RADS[®]4. De ellas, tres tuvieron diagnóstico de cáncer y, en el seguimiento, dos no retornaron para consulta. El tiempo transcurrido entre la realización de los exámenes, enviado al mastólogo, biópsia y tratamiento varió de 1 a 3 meses en cada etapa. El inicio del tratamiento fue después de 1 a 3 meses del diagnóstico. **Conclusión:** es necesario el control más eficaz para disminuir el tiempo de espera para consultas o envíos para posibilitar tratamientos menos agresivos y aumentar las chances de cura. **Descriptor:** Neoplasias de la Mama; Prestación de Atención de Salud; Atención Primaria de Salud.

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INTRODUCTION

Mammographic screening is one of the actions recommended by the Ministry of Health for early detection of breast cancer.¹ The percentage of late diagnosis²⁻⁴ as well as the high incidence and mortality rates from this disease in Brazil⁵ suggest that there may be gaps in screening strategies and early diagnosis of breast cancer in our country and reinforce the importance of implementing preventive measures for their control, with emphasis on primary health care. Studies show that the challenges faced by women in the search for health care have diverse nature and can be associated with the therapeutic itineraries used by them, difficult access to health services, low-skilled workers, lack of capacity of the public system to cover the demand and lack of referral of women to different levels of care.⁶⁻⁸

In this context, the Ministry of Health (MOH) outlined in 2004 strategies for screening and control of breast cancer and these were released by publication of the official document named Control of breast cancer, Consensus Document,⁹ which established that access to procedures for early detection of this neoplasm must be facilitated for women. Later, in 2006, in the context of the goals of the Covenant for Life, it was stipulated by the dimension Pact for Health that the control of this disease is a priority of public health policy, recommending the periodic performance of mammographies (MMG) and of the clinical breast examination (CBE), whose results should guide medical management.¹⁰

Regarding the performance of MMG in the Unified Health System (UHS), there is reference that in São Paulo, in 2013, the frequency of this examination in the target age group of 50-69 years was 79%.¹¹ On the other hand, a study referencing data from the Oncocenter Foundation of the State of São Paulo, published in the same year, points out that if the screening and early detection strategies were carried out properly, over a thousand deaths for late breast cancer diagnosis could have been avoided in the period studied.¹²

Based on the assumption that screening does not generally cover the entire female population, health education becomes a great ally in the early detection of symptoms. Thus, the ability for breast self-examination (BSE), the practice of CBE by health professionals, and public awareness about the issue facilitate early diagnosis, encourage women to seek health services in the case of changes

and, hence, decrease the costs of diagnosis and treatment, which becomes curative and not only palliative treatment.¹²

Efforts should be made towards effective early detection of breast cancer, in order to increase the coverage of the indicated tests and mitigate the factors that influence the achievement of this goal, such as those related to women, health professionals and the health system of country.¹²

Given the above, we believe that knowledge of the history of women with mammographic changes in the health system can help to identify the aspects that need to be improved with regard to the flow of referrals to the realization of breast cancer control tests at different levels of care.

OBJECTIVE

- To describe the journey of users of a Basic Health Unit (BHU) that presented abnormal mammogram results.

METHOD

Descriptive study carried out in a Basic Health Unit (BHU) of the Technical Health Supervision Vila Mariana and Jabaquara, of the Coordination of Health of the Southeast of São Paulo, from January 2013 to June 2014. The unit was selected for being one of the places where the UNIFESP develops teaching, research and outreach activities with medical, nursing, speech therapy and pharmacy students, integrating the objective proposed by the Pro-Health.

The Jabaquara district has an area of 14.10 km² with a population of about 223,780 inhabitants, of which 95,976 correspond to the number of women aged between 30 and 59 years.¹³In BHU, 3,800 women of all ages are enrolled.

The study population consisted of 664 women who underwent MMG in the period mentioned above. Of these women, all those who presented results mammographic BI-RADS® (Breast imaging reporting and data system) 0, 3, 4 or 5 were selected for study. The criterion for inclusion in the sample was based on the classification of the American College of Radiology, as follows above: 0 - Incomplete assessment, demanding realization of new examination; 1 - No change; 2 - Benign findings; 3 - Probably benign findings; 4 - Anomalies suspected, biopsy indicated; 5 - Finding highly suggestive of malignancy, biopsy and definitive clarification indicated.¹⁴

To obtain the data from the population, the delivery protocol of MMG was taken as reference. In this protocol had the ratio of women who had undergone this examination

during the study period. After verification of these protocols, 42 results met the inclusion criteria adopted and, then the medical records of these users were consulted to check the consistency of the identified data. As result, we excluded 15 records of women who had previously presented BI-RADS® 0 and that, when verifying the result, the registration of a new examination with BI-RADS® 1 or 2 was found. Thus, the sample consisted of 27 women to be interviewed at their homes, and during the visits it was found that three of them had moved to a new address, other three were not found at different times in which the visits were carried out and one woman did not want to participate. After those seven losses, the final sample consisted of 20 women.

For data collection, an instrument that has been pre-tested and refined with questions related to the purpose of the study was used. The questionnaire was applied during home visits after prior scheduling with the nursing team and community health agents (CHA) of the BHU. This occurred from January to April 2015. When users were not at home, they were contacted through phone call to request their attendance to the unit on scheduled day and time, explaining the purpose of this

request. Data were descriptively analyzed, and categorical variables summarized as numbers and percentage and for quantitative variables, mean and standard deviations were calculated.

The research followed the precepts of Resolution 466/12 issued by the National Health Council establishing criteria for research with human beings and was approved by the Research Ethics Committee (REC) of the Federal University of São Paulo (UNIFESP) and the Municipal Secretariat of Health of São Paulo (CAAE nº 34498314.6.0000.5505).

RESULTS

The study included 20 women with abnormal mammogram results, twelve with (60%) BI-RADS® 0, five (25%) with BI-RADS®3, and three (15%) with BI-RADS®4. The ages ranged between 37 and 72 years, with mean of 55 (SD ± 8.37). The following results were predominant: brown skin color (40%), married marital status (60%), incomplete elementary education II (65%), social class C2 (55%) according to the Brazil Criterion¹⁵ and 90% did not have private health insurance plan. As for working condition, 45% reported working outside the home and the majority (65%) had informal employments.

Table 1. Socio-demographic variables of women with mammographic changes. São Paulo (SP), Brazil, 2015.

Variables	BI-RADS®0 n = 12 (60%)	BI-RADS®3 n = 5 (25%)	BI-RADS® 4 n = 3 (15%)
Age, years			
Min./max., years	54.3 ± 7.6 37-67	53.4 ± 4.0 47-60	61.7 ± 7.2 46-72
Marital Status			
Single	4 (33%)	2(40%)	3 (100%)
Married	7 (58%)	2(40%)	-
Divorced	1(8%)	1 (20%)	-
Schooling			
Illiterate/Incomplete elementary I	1(8%)	2(40%)	-
Complete elementary I/Incomplete elementary II	9 (75%)	2(40%)	2 (67%)
Complete elementary II/Incomplete high school	1(8%)	1 (20%)	1 (33%)
Complete high school/Incomplete superior education	1(8%)	-	-
Occupation			
Retired	1(8%)	-	-
Housewife	5 (42%)	1 (20%)	2 (67%)
Activity outside the home	4 (33%)	3 (60%)	1 (33%)
On leave	2 (17%)	1 (20%)	-

Family history of breast cancer was reported by five women (25%) and in two of them the degree of kinship was mother, diagnosed after 50 years old. Of those who were diagnosed with cancer, only one reported family history, being female relative of 3rd degree, diagnosed after 50 years old. Inactivity was reported by 90% of women and 60% were overweight and obese. The age of menarche had happened between 12 and 15 years (70%). Contraceptive methods were reported by 80% of respondents. Among the

women with benign breast changes, 76% reported using contraceptives for a time of 12 years on average and, and among women with breast cancer, the use was reported by 100% of them, for 18 years on average. The average age of birth of the first child was 22.5 years and the time of breast feeding was 9.1 months. Among menopausal women (60%), 25% had done hormone replacement for one year in average.

The habit of performing BSE was reported by 70% of respondents, with initiation at the

age between 19 and 46 years (36.2 years on average). The realization of CBE by health professionals was mentioned by 65% of users and was performed for the first time at the age between 17 and 70 years, and seven (35%) of the interviewed women had never performed it. As for the frequency of the examination by professionals, only 25% claimed to have been examined for at least once a year.

All women reported having performed MMG and breast ultrasonography (USG), the average age of initiation was 40 and 46.4 years, respectively.

As for the follow-up, two (11%) women had not returned to the query to know the results of the first MMG. In the case of the other 18, the time spent between the completion of MMG and the evaluation by a physician in the BHU was 1 to 3 months. Of these, nine (50%) were referred to USG, five (28%) to a further

MMG, two (11%) to Mastology clinic and two (11%) to control at the BHU.

With regard to the time between application of examinations and returning to BHU for medical evaluation, the distribution was as follows: 1 to 3 months for the result of the new MMG (40%); 1 to 3 months for the result of breast USG (57%) and; and 1 to 3 months for referral to breast cancer specialist (33%). The five women (27.8%) who were referred to breast cancer specialists made biopsy, resulting in diagnosis of breast cancer in the case of three (16.7%) of them. The treatment of these three women began 1-3 months after diagnosis, two in a public hospital and one in a private hospital, covered by the health insurance plan. Thus, for women diagnosed with breast cancer, the time between the first MMG and the start of treatment ranged from 4 to 9 months.



Figure 1. Journey of women diagnosed with breast cancer and the time involved. São Paulo (SP), Brazil, 2015.

Among the women diagnosed with cancer, two said that this disease is not preventable and the fact of knowing the risk factors before diagnosis did not mobilize them to adopt healthier practices aimed at the prevention of the disease. However, after the discovery, they all said they had diminished and/or eliminated habits considered risk factors and reported also that early detection and treatment of cancer reduces the severity of the disease.

For most women (92%), the BHU team was important, particularly the CHA, considered by 45% of them as the main professional who clarifies questions.

During the journey of women to control health, eight of them had complications along

the way. Among those with BI-RADS®0, two of them discontinued the journey for lack of time, two were awaiting consultation at the BHU to follow-up, one of them sought care through health insurance due to the loss of the MMG at the BHU and other woman sought treatment at another BHU due to the delay in referral. Among the five women with BI-RADS®3, one of them was waiting for Mastology service for more than 6 months. As for the three women with BI-RADS®4, one of them continued the journey through health insurance plan because of the delay in referral.

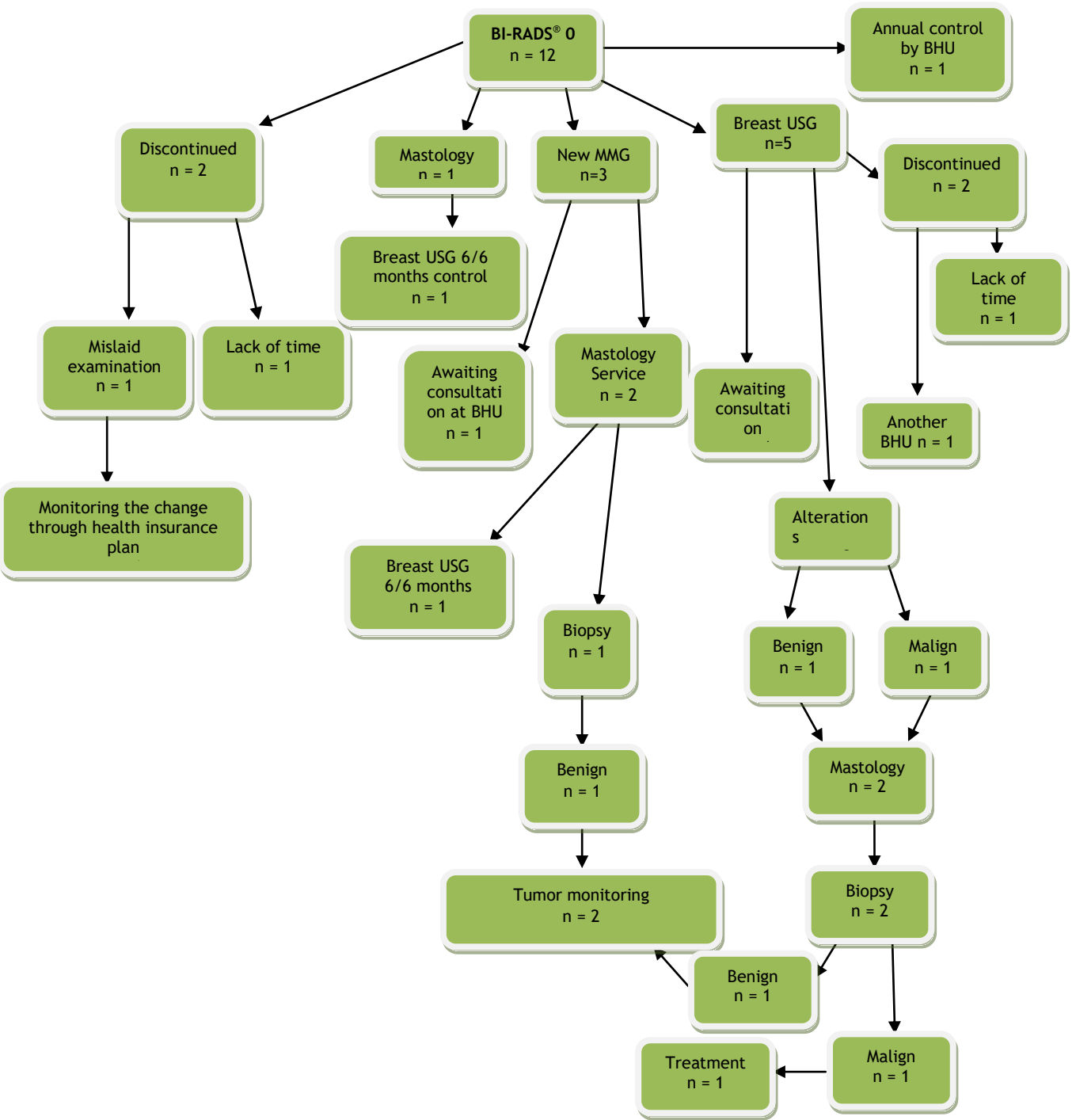


Figure 2. Trajectory of women with first mammogram BI-RADS® 0. São Paulo (SP), Brazil, 2015.

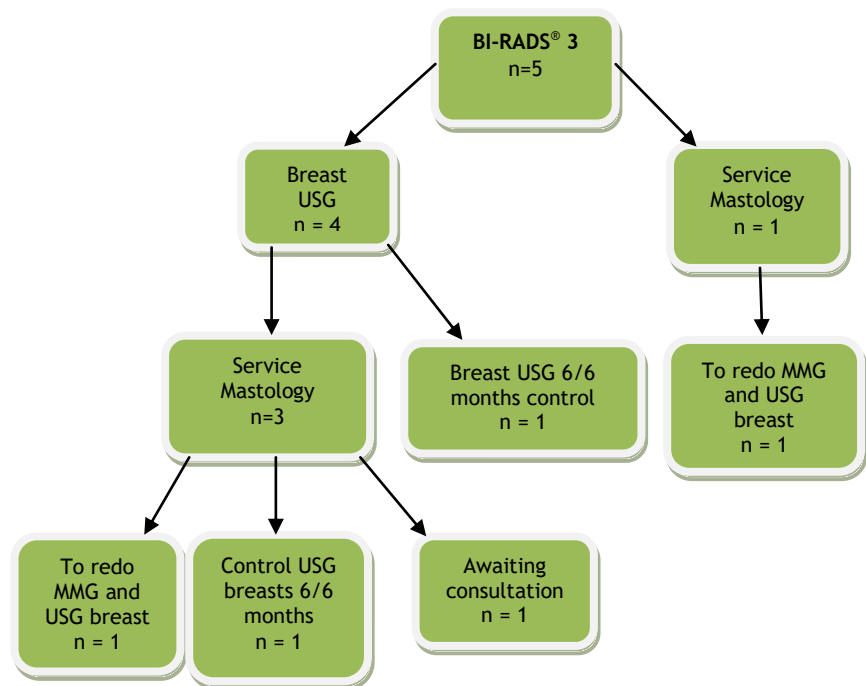


Figure 3. Journey of women with first mammogram BI-RADS® 3. São Paulo (SP), Brazil, 2015.

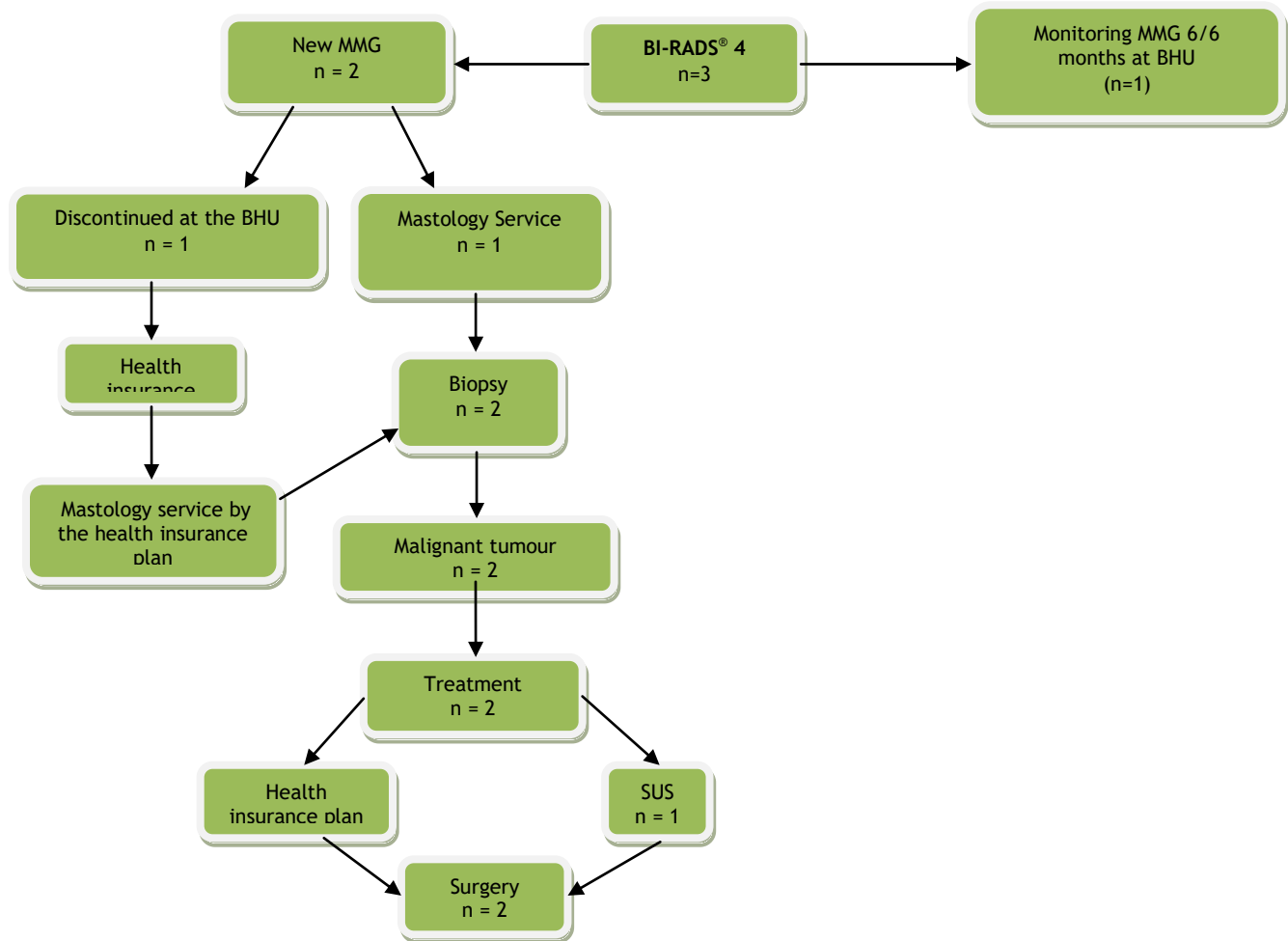


Figure 4. Journey of women with first mammogram BI-RADS® 4. São Paulo (SP), Brazil, 2015.

DISCUSSION

The results this study on the journey of women with mammographic changes assisted at the public health system show that, regarding socio-demographic data, some characteristics like skin color, level of education, lack of private health insurance plan and social class are similar to other studies with SUS users.¹⁶⁻⁷ Such characteristics are mentioned as determinants of the difficulties faced by these women in the search for resolution of the health problem, causing a delay in diagnosis and reinforcing

the need for interventions aimed at promoting equity.¹⁶⁻¹⁸ Regarding age, the average was 55 years, with predominance of women aged 50-59 years (45%) and ≥60 years (30%), what may be related to the age group with the highest incidence of breast cancer⁷, corroborating data of other studies.^{2,19} Another aspect to note is that, in this study, among the risk factors identified, the modifiable factors were the most mentioned; sedentary lifestyle was cited by 90% of respondents and overweight/obesity by 60%. Increased body mass index (BMI) in adulthood and physical inactivity increase the chances of

developing breast cancer²⁰ and suggest that the study population is more likely to develop breast changes. Another risk factor reported by 80% of respondents was the use of hormonal contraceptives for an average of 18 years among women diagnosed with breast cancer. Although this condition is included among the risk factors for breast cancer and, according to the data collected, the time of use of the hormonal method is considerably higher among women with cancer, there is controversy in this issue. Some studies²¹⁻²² argue that there is not enough evidence to prove the relationship between this illness and the use of hormonal contraceptives, since nowadays there is a wide variation in dosage and formulation.²²

Among the non-modifiable risk factors, family history of breast cancer is the most important for the development of this disease, in addition to the age factor.²³ According to data collected in this study, 25% of the women interviewed said they had cases of breast cancer in the family and they were in the age group between 46 and 62 years. However, among those diagnosed with breast cancer, only one reported family history, but not in a first-degree relative.

Analyzing the responses of the two women with breast cancer who said that this disease is not preventable and that knowledge of the risk factors before diagnosis did not encourage prevention, we can infer that there are personal, cultural and social barriers that influence the perception of the process of cancer. This finding contrasts with a study that shows that realizing the susceptibility for being part of a risk group and believing that there are factors that make a person susceptible to disease lead people to seek health.²⁴

On the other hand, the fact that after the confirmation of the diagnosis these same women reported that they had adopted behaviors to reduce or eliminate the risk factors for cancer reveals that to accept susceptibility and vulnerability, women need more intense stimulus to trigger a coping response towards this situation, regardless they have knowledge of the disease or not.²⁴

Health professionals, including nurses, are key players in guidance and awareness of women about the need to adopt healthy habits, as well as to perform tests to control the health of breasts. In this study, the majority of the interviewees said that the BHU team was important in this process, particularly the CHA, referred by them as the main members of the health team to clarify questions. Noteworthy is that these

professionals had the role to integrate and educate the community.²⁵

Among the tests for screening and early diagnosis of breast cancer, the CBE and MMG are highlighted by the MOH as the main actions for this purpose. In this regard, it is noteworthy that, in this study, 35% of users with mammary changes indicated that they had never undergone CBE. This situation contrasts with the recommendations of the MOH that says that the realization of CBE by health professionals should be done in any clinical consultation, regardless the age of women.⁹ This result may have been influenced by the own management system of the unit, which has a pre-determined time for consultations.

Another aspect of this problem is pointed out in a study on delayed diagnosis of breast changes where authors show that this may be related to the difficulty of women to identify signs and symptoms or demand for care. However, these researchers emphasize that only a quarter of delays in diagnosis happened due to the patient, demonstrating that the health system makes a significant difference in early detection of breast changes.¹⁷

Another measure that can help in the accidental discovery of breast changes is the BSE. Although this is not indicated as a diagnostic method and does not replace imaging tests that can detect non-palpable lesions, BSE is an important action to the self-knowledge of the body.²⁶

Regarding the follow-up of patients, the interval between the MMG exams, new diagnostic MMG and/or USG, and the time for consultation with a mastologist, considered here the time between the first consultation and initiation of treatment, ranged from four to nine months. According to a study, the time spent by women with breast change in the phase between the beginning of the search and the diagnosis is longer than the further steps, indicating also the health care system as the main factor causing delay in the diagnosis of breast cancer.²⁷

One thing that called our attention was the fact that seven users reported difficulties in carrying out screening tests and diagnostic or specialized consultation for continuity of screening. This included the loss of the MMG at the BHU, delay in referral for further tests or for consultation with an expert and lack of time to return the BHU to know the results of the tests. This shows bottlenecks in the flow of these actions, as well as deficiency in the active search for women that do not return. This suggests the need for greater control by the BHU of the women in their different

routing flows, in order to keep full coverage of users of their assigned area.

Difficulties to early detection can be caused by repressed demand, particularly in the case of specialist consultations and examinations, part of the secondary and tertiary levels of care. It is up to the municipal health department to organize the care network, allowing greater agility of flow.²⁶ Authors argue that making possible to request examinations in primary health care is not enough; it is necessary to ensure access to its realization.²⁸

The time between the confirmation of the diagnosis and the beginning of the various modalities of treatment (surgery, chemotherapy and radiotherapy) ranged from one to three months, showing that the flow of care at this stage is relatively appropriate, according to parameters established in the Law that indicate the time of 60 days.²⁹ The main delay happens between the completion of the first MMG and the diagnosis of the lesion. This is similar to that found in a study conducted in Rio Grande do Sul with SUS users that indicated that, although the time to start the treatment is previously stipulated, such determination is possible in only part of the system. This happens in spite of screening and early diagnosis strategies. Greater accessibility to examinations and to the institution where effective treatment is to be carried out within the expected time are necessary.^{24,30} This situation suggests that there are still gaps in the journey of women. Delays in health search process happen probably due to the difficulties in the articulation between the different levels of the health care network. The lack of a control system for women with abnormal screening tests, delayed referrals and withdrawals and even care for women undergoing treatment for breast cancer are factors that hamper a most effective attention to health and limit the solution options.

CONCLUSION

Aspects related to the journey of women with mammographic changes in the present study show that, despite the existing strategies for the screening and early diagnosis of breast cancer, barriers in the flow of referrals exist and led to delays in diagnosis and treatment. This suggests the need for more effective control in order to enable a timely intervention with better results. It is also important noting that more research is needed on the various impacts of the journey of women with breast changes in order to support the formulation of new and more

effective strategies for early detection of cancer and to improve the support for assisting the population covered by the BHU and by the family strategy model.

FINANCIAL SUPPORT

CNPq, Scientific Initiation Scholarship and research development.

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Submission: 2016/05/12

Accepted: 2017/02/08

Publishing: 2017/03/01

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