Health education and breast cancer prevention in the city of Itaúna, Minas Gerais

ABSTRACT | Objective: To report the experience of educational actions carried out with professionals from the Family Health Strategy, on the prevention of breast cancer and the encouragement of self-examination. Methods: This is a descriptive, experience report type study conducted with 28 health professionals in the city of Itaúna, Minas Gerais, between September and October 2019. A pre- and post-intervention questionnaire was used to compare knowledge and acquired, in addition to a practical palpation activity on breast prostheses. Results: There was a predominance of participants aged between 31 and 38 years old (35.71%), followed by professionals between 23 and 30 years old (32.14%). The results showed that 60.71% of the participants reported having knowledge about the subject, 28.57% said they did not know what it was about and 10.72% did not answer this question. Conclusion: The applied intervention serves as a basis for these professionals to disseminate new knowledge to the population.

Keywords: Community health workers; Health education; Breast neoplasms; Nursing technicians.

INTRODUCTION

Breast cancer is one of the challenges of population aging, and of the chronic diseases that plague this process. It is the type of cancer that most affects and kills women in Brazil, except for non-melanoma skin tumors (1). It is considered a public health problem, due to the difficulty in guaranteeing the population’s full access to the diagnosis and treatment of this disease by the health system. (2)

Malignant neoplasm of breast, as is also known, is the result of uncontrolled proliferation of breast cancer cells which can invade other tissues. Some tumors can develop faster than others, however most cases have a good prognosis in the face of early diagnosis and...
treatment. Tumors can be detected in different stages (staging), in situ being located in only one location, and infiltrating when they invade other organs or reach lymph nodes. (3)

According to recent global statistics from Globocan 2018, an incidence of 2.1 million cancer cases and 627.000 deaths from the disease have been established (4). In 2016 in Brazil, there were 16.069 deaths of women due to breast cancer. (1)

Estimates for each year of the 2018-2019 biennium underscore that 59.700 new cases of breast cancer are expected in Brazil, with an assumed risk of 56.330 cases per 100.000 women. It is estimated that in the 2018-2019 period, in the southeast region, the number of incident cases per year is approximately 30.880. (5)

It is important to note that despite not having a single etiology, some risk factors predispose the disease to manifest. Being a woman and age remain the most important factors, with a higher incidence up to 50 years. In addition to factors related to the woman’s reproductive life, such as early menarche and late menopause, not having children or pregnancy after 30 years, not having breastfed, using oral contraceptives and post-menopausal hormone replacement therapy. Other phenomena that can contribute to the development of cancer are related to genetic changes, family history with the disease and high density of the breasts. (6,1)

With regard to environmental factors, studies indicate overweight, physical inactivity, smoking, alcohol abuse and frequent exposure to radiation. In these circumstances, it can be said that the control of the aforementioned elements would encourage the delay or even the prevention of this neoplasia in one third of the affected population. (6)

Harmoniously, the promotion of health education activities in Primary Care through the dissemination of knowledge about breast cancer and its risk factors, promoting the active participation of the population and encouraging early diagnosis, are of great relevance for adherence to healthy lifestyle habits, aiming at a change in the current scenario in which the disease is found. (6)

Primary Health Care (PHC) is characterized as the main place for the development of these actions, because in addition to using the Family Health Strategy (FHS) model, it is a priority gateway for SUS, with the purpose of integrating and solve most of the population’s problems. (7) In this context, the professional-user relationship present at this level of attention stands out, which provides a bond without the woman having any pathology (or not), establishing a relationship of mutual trust and enabling the main role of this woman in her self-care. (2)

The role of nurses in PHC in the early detection of breast cancer is essential, including actions to promote health, treatment and rehabilitation. The nurse’s functions in the control of breast cancer stand out as having consultations with a Clinical Breast Examination (CBE) according to age and clinical condition, observing signs and symptoms referring to neoplasia, requesting and analyzing tests, referring to the specialized services and monitor the evolution of the diagnosis and / or treatment process, develop and participate in permanent education activities. However, recent research demonstrates the need for training these professionals in relation to the topic, due to the limited understanding of risk factors, screening methods and insufficient continuing education, the deficit in such knowledge may interfere with the intervention plan proposed by the Ministry of Health for disease control, (7) thus justifying the implementation of this research project.

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METHODS

This is a descriptive study, of the experience report type, related to the educational health action with FHS professionals, referring to breast cancer. The project carried out by nursing students at the University of Itaúna (ITU) promoted training on breast cancer, its risk and prevention factors, in addition to encouraging breast self-examination, through lectures and roundtables with the aid of visual resources, of palpation and evaluation of knowledge on the subject.

The municipality of Itaúna is located in the Midwest region of the state of Minas Gerais, and according to estimates by the Brazilian Institute of Geography and Statistics, the municipality has approximately 93,214 inhabitants. According to data from the Itaúna Municipal Health Secretariat, the municipality has 22 health units in the Primary Health Care (PHC) network, with 20 urban FHS, 01 rural FHS (this one being itinerant) and one other Health Unit in the model traditional service.

The target audience was composed of a total of 28 participants, including community agents, nursing technicians and other professionals inserted in the FHS's, linked to the Health Department of the municipality of Itaúna, Minas Gerais. For the recruitment of participants, the following inclusion criteria were defined: being over 18 years old, being in an effective work regime (public tender) or contract (temporary) and being allocated in the ESF’s of the city at the time of collection. The exclusion criteria were: professionals who were away from their work activities during the data collection period.

For this study, 05 units were chosen for convenience: easy access, easy visits, lower cost and greater feasibility of the present study. The actions took place between the months of September and October of 2019, with an average duration of 40 minutes per unit. They were previously scheduled with the units at a time available for professionals and speaker.

Regarding the resources used, through literary research on the theme, a power point presentation and later a banner was created to assist in the lectures. The “mamamiga” that was supplied by the University, is composed of three breast prostheses, in which one of them does not present alterations and the others have palpable nodules and deformation in the skin, contributing to the practice of palpation and instruction of breast self-examination.

The action was divided into three moments, the first of which was pre-evaluation, the second of the content exposure, which consisted of the definition of breast cancer and some epidemiological data of the disease, basic structure of the breasts, stages and types of breast cancer (in situ and infiltrating/ ductal and lobular), risk factors, symptoms, early detection with screening as a strategy and preventive measures such as breast self-examination. Finally, listeners were encouraged to exchange experiences, clarify doubts and touch the "mamamiga", while answering the post-information questionnaire.

Based on the understanding of the proposed theme, a questionnaire was applied to assess previous knowledge and effectiveness of the lecture, consisting of 06 statements about breast cancer in general and 09 possible risk factors, in which they should be marked only with “yes or no”, before and after the exposure of the contents. The objective was to compare the information that the research participants had before the intervention, and that acquired after the educational activity. Following, the empirical data collected were treated with simple statistics and recorded in the Microsoft Office Excel software (2010), which included the structuring of a database.

It is worth mentioning that there was no need for appreciation by the Research Ethics Committee (CEP) / National Rese-
The data collected in relation to the age of the study participants revealed that there was a predominance of participants aged between 31 and 38 years old (35.71%), followed by professionals between 23 and 30 years old (32.14%).

According to the level of knowledge of the participants about the breast self-examination, collected in the second moment of the research, it was observed that 60.71% of the participants reported having knowledge about the subject, 28.57% said they did not know what it is about and 10.72% did not answer this question.

Table 1 shows comparative data related to knowledge about breast cancer, pointed out before and after the action taken with health professionals.

**DISCUSSION**

Therefore, it is necessary to promote more educational actions for these professionals, encouraging continuous updating in the health area. The chance of a cure as a result of an early discovery is one in three cases of breast cancer. But the fear and the lack of knowledge prevent patients from talking about the subject, which leads to a delay in diagnosis. So it is important to demystify the disease as an inevitable death sentence. (11)

The understanding of the criteria for the development of breast cancer was insufficient in the pre-erudition evaluation, but satisfactory after intervention, especially the contraceptive factors, alcoholic beverages and not having children. It is already known that women using hormonal contraceptives, for a long time and before the first pregnancy, constitute the main group for the development of breast cancer. (6)

Regarding the level of alcoholic beverage intake, the risk is proportional to the time of exposure and the amount ingested, is a predisposing factor for several types of cancer including breast cancer. Alcohol releases free radicals that can damage DNA, and in addition to increasing estrogen levels it also acts as a solvent, facilitating the entry of dietary or environmental carcinogens into cells. The high consumption of this substance can still lead to insufficiency of essential nutrients, making breast tissue more vulnerable. (1)

The topic that most changed in the responses after the lecture is associated with pregnancy. Most participants in this action were unaware that not having children was a risk factor for the development of breast cancer, however they knew that prolonged breastfeeding was not a threat. The two assertions are directly linked, since during the period of pregnancy and breastfeeding there is a reduction in hormones that increase the risk for cancer, in addition, the act of breastfeeding promotes the elimination of breast cells with possible mutation. Therefore, the longer the duration of

<table>
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<tr>
<th>Table 1- Knowledge about breast cancer.</th>
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<td><strong>Câncer de mama é:</strong></td>
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<tr>
<td>Doença que não tem cura</td>
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<tr>
<td>Doença sem prevenção</td>
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<tr>
<td>Doença genética</td>
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<td>Doença que tem cura</td>
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<tr>
<td>Doença de pessoas idosas</td>
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<tr>
<td>Não sabe nada a respeito</td>
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<tr>
<td><strong>Fatores de risco</strong></td>
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<td>Sobrepeso</td>
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<td>Sedentarismo</td>
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<td>Tabagismo</td>
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<tr>
<td>Anticoncepcional</td>
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<tr>
<td>Bebida alcoólica</td>
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<tr>
<td>Radiação</td>
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<tr>
<td>Não ter filhos</td>
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<tr>
<td>Amamentação prolongada</td>
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<td>Histórico na família</td>
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Source: Field research, 2020

Arch Ethics Commission (CONEP), as it is an experience report, but it complied with the ethical principles as per Council resolution National Health Board 466/2012. All participants signed the Free and Informed Consent Form (ICF) before the beginning of the interviews.

**RESULTS**

In the first moment of the questionnaire, the study participants (name, age, sex, profession) were characterized. In the second moment, the participants were instructed to answer a questionnaire with two mediators about the subject of breast cancer and its risk factors, so that in a third moment, the action of expanding knowledge was carried out based on scientific and practical reasoning on the subject. In the final phase, listeners were encouraged to exchange experiences and reconstruct their responses, based on the information acquired.
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The action was carried out with instructions to perform the breast self-examination, among them: the inspection in the mirror and the periodicity criteria. There was a demonstration, in a breast prosthesis, of the direction of movement with the end in the nipple expression, and it was mentioned about the importance of also feeling the regions of the axilla, supra and subclavicular, due to the lymph nodes present there. Subsequently, the dynamics of palpation by the participants took place.

During the dynamic the participants showed interest and curiosity in the activity. Most revealed that they were not in the habit of performing self-examination, despite knowing about it. Self-examination is a self-care practice that encourages the individual’s responsibility for health and the detection of breast cancer. The media is always publicizing the importance of this action, but the correct way to carry it out is still unknown to the general population.

In view of this reality, it is imperative that health services invest more in the training of their professionals. Because self-examination is an important strategy that aims at women’s self-knowledge in relation to their own body, making them responsible for their care in addition to providing the opportunity for an early diagnosis, which increases the chances of cure in the case of breast cancer.

At the end of the action, professionals were encouraged to disseminate the knowledge acquired to their users, family and friends, through positive action and awareness about breast cancer, and especially prevention.

The present study has limitations, such as the level of education, the population in focus were the community agents and nursing technicians (medium level). Some answers were inappropriate, as it determined two opposite propositions to be correct, others were incomplete (they were not marked). Throughout the action, it was possible to notice difficulty in understanding the questionnaire by some professionals, others did not pay attention to the explanations of how it should be completed. However, the results were satisfactory and the proposed objective was met.

CONCLUSION

The current epidemiological scenario, in which the health situation in Brazil is found, requires continuous updating of its professionals not only at the medium level, but also at the higher level. Therefore, it is necessary that managers of the public health network invest more in training their employees, and implement projects like this for the general population, as a practical way of establishing health and preventing diseases. In relation to the participants, the applied intervention serves as a basis for these professionals to disseminate the new knowledge to the population.

References