Breast self-examination by nursing professionals

ABSTRACT
Most breast tumors are detected by women, not health professionals, therefore breast self-examination (BSE) continues to be an efficacious strategy. The study objective was to analyze BSE performed by nursing professionals and factors that hinder their perseverance in this practice. This descriptive study was performed with 159 professionals: 40 nurses, 48 nurses aides, and 71 health agents from 19 Basic Health Units located in Fortaleza (Ceará, Brazil). Data collection was performed using a self-administered questionnaire, and the analysis was based on the Self Care Theory. Of the 159 professionals, 86 (54%) performed BSE on a monthly basis. Of the 73 professionals who did not perform BSE, 60 (82%) reported the reason for that was forgetting, 38 (52%) for not trusting the technique/did not know the correct technique, and 35 (48%) due to lack of health care. It was found that although most women reported performing BSE, the professionals felt insecure and would like to learn better about this technique.

KEY WORDS

RESUMO
Os tumores da mama, na maioria, são detectados pela mulher, portanto o autoexame das mamas (AEM) ainda é uma estratégia eficaz. Objetivou-se analisar a realização do AEM por profissionais de enfermagem e fatores que dificultam a adesão dessa prática. Estudo descritivo, quantitativo, desenvolvido com 159 profissionais, sendo 40 enfermeiras, 48 auxiliares e 71 agentes de saúde, de 19 Unidades Básicas de Saúde de Fortaleza, Ceará. Os dados foram coletados com questionário autoaplicável e analisados com base na Teoria do Autocuidado. Das 159 profissionais, 86 (54%) realizavam o AEM mensalmente. Das 73 que não realizavam, 60 (82%) referiram como motivo o esquecimento, 38 (52%) por não confiar na sua técnica/não sabiam a técnica correta, e 35 (48%) por falta de atenção à saúde. Constatou-se que, apesar da maioria declarar fazer o AEM, as profissionais se sentiam inseguras e gostariam de aperfeiçoar esta prática.

DESCRIPTORES

RESUMEN
Los tumores del seno, en la mayoría, son detectados por la mujer, por lo tanto el auto examen de los senos (AES) todavía es una estrategia eficaz. Se objetivó analizar la realización del AES por profesionales de enfermería y factores que dificultan la adhesión de esa práctica. Estudio descriptivo, cuantitativo, desarrollado con 159 profesionales, siendo 40 enfermeras, 48 auxiliares y 71 agentes de salud, de 19 Unidades Básicas de Salud de Fortaleza, Ceará. Los datos fueron recolectados con un cuestionario auto aplicable, y analizados con base en la Teoría del Auto Cuidado. De las 159 profesionales, 86 (54%) realizaban el AES mensualmente. De las 73 que no lo realizaban, 60 (82%) refirieron como el olvido, 38 (52%) por no confiar en su técnica/no sabían la técnica correcta, y 35 (48%) por falta de atención a la salud. Se constató que, a pesar de que la mayoría declaró hacer el AES, las profesionales se sentían inseguras y les gustaría perfeccionar esta práctica.

DESCRIPTORES
INTRODUCTION

Breast self-examination (BSE) is a painless, cost-free and easy physical exam that allows premature detection of a neoplasia enabling efficient therapeutic action, all of which may extend the patient’s life, avoid future and severe physical sequelae as well as emotional, social and economical problems[6]. This examination is also extremely important so the woman it able to have better knowledge of her breasts typical aspects, such as shape, size, skin and nipple texture; all of which will greatly assist in the early diagnosis of any abnormality that may arise and, thus, lead to premature diagnosis, maybe avoiding breast mutilation.

Systematic breast self-exams are recommended since the 1930’s and have been incorporated into public health policies in the US since the 1950’s. When performed monthly and correctly, this exam can increase the chances of early cancer detection leading to better treatment and more favorable diagnostics[6, 3].

The World Health Organization (WHO) estimates that 1,050,000 new cases of breast cancer arise annually in the world[6]. Breast cancer affects women in their bio-psycho-social and spiritual dimensions, as it is considered a disease whose medium and long term consequences may cause breast mutilation and psychological, psychospiritual and social traumas, including anxiety, despair, fear and depression and other serious repercussions in the family among which death can also be cited[6].

Breast cancer is more common in women. The National Cancer Institute (INCA) estimates that in 2008, 49,400 women will be diagnosed with breast cancer in Brazil; the death rate will be of 51 cases in every 100,000 women group. In the Northeast region, the death rate if of 28.4 cases and in the state of Ceará it is of 35.65 cases for every 100,000 women[6].

Even though the cause of breast cancer is still considered idiopathic, some factors appear to increase the risk of developing it. Some of the are genetic factors, emotional conditions, hormonal alterations, and diabetes. Added to the list of risk factors is the occurrence of such neoplasia in younger and younger patients[6].

Nursing professionals which work in primary health care services can give information and orient patients on the correct realization of BSE.

In a previous study done with university students from health areas, it was observed that 68.5% of them did not perform BSE monthly[6]. Given this information and considering some significant obstacles for the practice of self-care in health areas, answers were sought after for the following inquiries: Are nursing professionals aware of the importance of early detection of breast cancer? Are they attentive to the importance of doing the breast self-exam? Which factors contribute for the disregard of touching their own breasts? What leads to the woman deciding not to take care of herself?

Faced with such problems, it was attempted to analyze the practice of breast self-examination by health-professionals and the factors that interfere with this practice.

METHOD

A descriptive study with a quantitative approach, aiming at amplifying the experience about reality in the practice of breast self-examination by nursing professionals, regardless of race, age, color, marital status, number of children and social standards.

The research was carried out with professionals from the nursing personnel of 19 Basic Health Care Units for Family Welfare inserted in the Regional Executive Secretariat (SER) VI from the city of Fortaleza in the state of Ceará. These units attend to a population of approximately 500,000 people, representing the largest geographical area among the regional secretariats, which act according to the principles of SUS with one or more than one family welfare teams.

Nursing professionals which work in primary health care services can give information and orient patients on the correct realization of BSE.
Based on the population of 311 professionals that worked at SER VI, a non-probabilistical sample was chosen, by quota, and in each subgroup of nursing professionals, a quota, proportional to the total number of professionals was selected; because by using quota sampling the researcher uses his knowledge about the population to bring some representation to the samples. When working with quota samples, a layer of the population is identified and a number of elements necessary to this sample is specified. Using information about the composition of the population, the investigator can assure that all possibilities are represented.

To determine the sample, the following formula was used: \[ N = \frac{1}{E^2} \] where N=sample size and E²=tolerated standard error equivalent to 10%. A minimum sample size of 100 professionals was encountered, but it was preferred to use a larger sample of 159 professionals to give it better significance. The group was formed by 40 female nurses, 48 licensed practical nurses and 71 community health agents (ACS). The criterion to select the professionals was that they should be in contact with families engaged in educational actions and applying strategies for health promotion and disease prevention in their workplace and in the community.

Data collection was performed between January and April 2007 using a self-applying questionnaire composed of two parts. The first part contained questions for personal identification and life style, and the second was composed of questions referring to breast cancer, self-care and possible factors which could interfere with BSE. The questionnaires were answered in the basic health care units, under acknowledgment from the unit’s supervisor. The participants signed a term of free will to the participation in the study granting them full confidentiality in the terms of the information obtained and the right to stop participating in the study at any given moment. So to preserve their identity, their names were not revealed at any moment.

Data were pooled and organized using SPSS (Statistical Package for the Social Sciences) platform version 11.5 making use of descriptive statistical analysis, thus verifying distribution, and absolute and relative frequencies for each variable according to the professional category.

As data analysis was based on the Theory of Self-Care and it was decided to use the developmental related to human development process, and the factors which could influence this evolution at some stage of the vital cycle. Therefore, the chosen events for the research are aimed at the care of the self, behavioral changes and life style.

This study was approved by the Ethics Committee of the University of Fortaleza - UNIFOR, according to report number 269/2004 abiding by all ethical aspects from resolution 196/96 from the Health Ministry.

RESULTS AND DISCUSSION

Among the 159 participants, the prevailing levels of school education found were at the High School level composing 107 participants (67.3%), and University Degrees composing 38 participants (23.9%). Among the 40 female nurses, three (7.5%) had taken a specialization course and one (2.5%) had a master’s degree. One of the licensed practical nurses (2%) had not concluded her higher education. From the 71 community health agents, 62 (87.3%) had concluded high school, five (7%) had not concluded elementary school, two (2.8%) had not concluded their higher education and one (1.4%) had not concluded high school. It was observed that the workers had satisfactory knowledge of health care to attend to the patients and to use it in their own favor and the community’s. The licensed practical nurses and the community health agents, although numerically small, are very interested in improving their knowledge of the cited matters.

Among the participants, 145 (91.2%) lived with their families, 105 (66%) had been born in Fortaleza, 74 (46.5%) were married and 135 (84.9%) declared not having any type of vices. The age for the menarche of the participants varied from nine to 18 years of age, prevailing in the interval from 11 to 14. This information indicates that these women, possibly, had or have a healthy life-style, favoring health promotion and life quality.

Although 91 (57.2%) of the women do not practice physical exercises for their vanity, they showed satisfaction towards their physical appearance, because 140 (88.1%) appreciated their body and 134 (84.3%) appreciated their breasts. This condition facilitates the self-understanding of the body and it makes it easier to identify the alterations that may need higher attention for health maintenance and to avoid further damage.

The care of the self implies being intimate with your body, feeling it, embracing it and respecting it. Caring is to be tuned with the rhythm and to stay with it. Caring means to have a loving relationship with reality; your investments of zeal, devotion, solicitude, attention, and protection for what is worthy and interesting for the person. Care for your health is commonly revealed in the actions of self-care.

Self-care’s goals are the actions that may contribute specifically for the integrity of functions and for human development. These purposes are expressed before actions, whose grounds is to help people satisfy their own therapeutic necessities of self-care.

From the 159 nursing professionals, 86 (54.1%) performed BSE monthly and, among these, 64 (40.3%) did it after having their period, 8 (5%) did it before having their period, three (1.9%) during it, two (1.3%) did it on a fixed day of the month and one, during and after having her period.

These results show that, even though 54.1% of the patients do conduct BSE on a monthly basis, there is still controversy about the ideal moment for such practice, which must be done monthly between the seventh and tenth day after the beginning of the menstruation period, but for women that no longer menstruate due to menopause or hysterectomy, or...
for those who are breast feeding a fixed day of the month should be chosen to carry out the self exam\textsuperscript{(11)}.

Breast self-exam, preconized as an early detection method of mammary nodules is an efficient and low-cost exam. However, when done sporadically, its results are as inefficient as when done incorrectly. For one author\textsuperscript{(2)}, 80\% of the tumors are detected by a woman when she touches herself, whereas another author\textsuperscript{(3)} considers that up to 90\% of breast cancer cases are detected by the patients themselves.

Among the evaluated professionals, 145 (91.2\%) declared to know how to perform the breast self-exam, and all nurses claimed to master the correct technique. Among community health agents, 30 (42.2\%) claimed to do the procedure once a month and, among these, 88.4\% guaranteed to know very well how to do it. However, 87.5\% stated that would like to learn it correctly. This paradox was also noticed in the other groups, making us question their degree of understanding of the technique when it comes to breast self-examination.

BSE is of great importance because it is practical and it helps the woman familiarize herself with the size and shape of her breasts, and, furthermore, to recognize the normal aspects of the skin, giving her better comprehension of when to look for medical help because something is out of the ordinary with ample time. During BSE, the woman must examine symmetry, color, shape, skin retraction and nipple retraction, swelling, fissures and any other considerable alteration. One of the recommended techniques for breast self-examination is circular palpation, starting from the nipple and slowly descending to the skin of the breast and axilla. This technique was determined as the most widely accepted for a group of nursing students in a study to evaluate the knowledge and lack of self-care about this particular topic. This experiment demonstrated that there is much resistance and that there are barriers to make breast self-examination a common procedure, but it also reveals the wish, will and effort of these women to learn how to do it correctly\textsuperscript{(12)}.

Among the participants, 41 (25.8\%) had already had a problem with their breasts and 73 (45.9\%) had had a case of cancer in the family, either from their mother, aunt or grandmother.

According to INCA, women diagnosed histopathologically with atypical proliferating mammary lesion or in situ lobular neoplasia have a high risk of developing breast cancer. For this reason, the attention with health and BSE practice must be stimulated\textsuperscript{(13)}.

Among the 41 participants who had had a breast problem, 25 (60.9\%) examined their breasts monthly, showing attention for self-care and assuming a responsible position towards their health. Even though the state of caring for the self flourished in the individual when he finds himself in a state of necessity\textsuperscript{(13)} and even after observing in this study that 16 women had already had some king of mammary pathology, they did not report this feeling nor the habit of self-examination.

By using BSE as an early detection method for breast cancer and believing in the instruction of the woman to fulfill it, it is seen in the cited method a means for recognition of the neoplasic disease in an early and curable stage\textsuperscript{(14)}. When diagnosed prematurely, the chances of curing a breast cancer case might reach 95\% and it probably will not be necessary to mutilate the breast. Considering the lethality of this disease and its physical and emotional sequelae, one may say that an early diagnosis is of absolute and paramount necessity\textsuperscript{(2)}.

Among the 159 participants, the 73 professionals (45.9\%) that did not perform BSE regularly were 41 community health agents, 19 licensed practical nurses and 13 nurses. They reported as interfering factors for BSE: forgetting it, 60 (82\%); lack of attention for their health, 35 (47.9\%); they did not trust their own technique/did not know the correct procedures, 38 (52\%); were afraid of the disease or afraid of finding nodules, 21 (28.7\%); did not believe in BSE, 17 (23.3\%); did not know the importance of early diagnosis, 12 (16.4\%); did not like to touch their body or were ashamed of doing so, 11 (15\%); stated not having had any cancer cases in the family and were not old enough to develop breast cancer, 10 (13.7\%) and seven, (9.6\%) because they believed they would never be affected by it.

The reason most widely cited for not performing the exam monthly was forgetting it, which was reported by 13 (100\%) of the nurses, 33 (80.4\%) community health agents and 14 (73.6\%) licensed practical nurses. A possible reason for this is the fact that the brain is more likely to store strong emotions while others tend to last very little and, if not repeated, will be forgotten due to lack of practice and repetition. Memory if exercised regularly grows bolder, but if not worked with will dissolve itself into oblivion\textsuperscript{(15)}.

Most people only pay attention to their own memory when it fails, particularly when lapses lead us into embarrassing situations or prevent us from concluding an important activity. Many believe that forgetting is something bad, undesirable and say that would like to have a better memory. This is perfectly comprehensible if one thinks on the many times we become frustrated because we have forgotten something. Even though it is hard to reject the hypothesis of losing information due to the lack of use of our memory, people are led to believe in the idea that information, once stored, will not be passively lost, even if not accepting that one can’t remember everything\textsuperscript{(15)}.

Another barrier cited by the 35 (47.9\%) professionals that did not carry out periodical self-exams was the lack of attention for their own health, claimed by 17 (41.4\%) com-
munity health agents, 11 (57.8%) licensed practical nurses and seven (53.8%) nurses. This information leads us to believe in the development of actions aimed at self-care, since it is possible to draw a correlation between the care for the self and the good governing of a town; only those that care enough about themselves can care about others. This particular self is, at the same time, subject and object to be cared about, it is the soul that uses the body, a subject-soul of instrumental action, of relations with itself and others in behaviors and attitudes(3).

Those who care appropriately about themselves find conditions to relate and conduct satisfactory relationships with others. For these relationships to be conducted adequately and deliberately it is necessary that each one of us takes good care of oneself, and of the others with competence and continuous improvement, for the individual and collective well-being. Therefore, caring about oneself means, above all, caring with liberty and criterion both about others and ourselves, including our passions(13).

In this study, both the 24 community health agents and the 19 licensed practical nurses, 14 (73.7%) and 24 (58.5%) respectively, claimed not to trust their own techniques or not to master the technique appropriately. This result shows that it is highly necessary that these professionals receive proper training to develop their skills for the care of the self and that of others. It is important to highlight that 22% of the community health agents and 15% of the licensed practical nurses did not know the importance of early cancer detection through BSE. As health professionals and women, they must be very well informed and oriented when it comes to the exams for early detection of breast nodules, which are many times aired in campaigns from the Ministry of Health.

The awareness about the necessity of breast self-examination starts with showing the importance of this procedure by the health team that works in the basic health care units. It is necessary that these professionals be continuously informed about the importance of BSE so they can supply the population with quality information, be it individually or in groups. It is also important to use all resources available to facilitate this practice for more women and their many ages and social contexts(13).

The information, knowledge and critical conscience are determining factors for the execution of actions of self-care in health programs and, therefore, must value the individual and collective well-being.

Any health professional that deals directly with the population and is conscious of the epidemiological profile of the patients can establish preventive and early diagnosis strategies for the population in general. The relay of information is an efficient strategy to develop potential in women and it is up to the nursing team to orient such practice along the community.

For BSE to reach its objective of early detection of breast cancer and consequently play a role in reducing mortality rates, participative campaigns must be conducted to give concrete information about the technique and the importance of self-care, along with incentives in education so that the given information is incorporated and leads to changes in the behavior of women. The propagation of these actions must be stimulated in all supportive levels so that all social groups are effectively reached(5).

Approximately 39% of all community health agents and 26% of all licensed practical nurses were afraid of breast alterations or of having the disease. The nurses, on the other hand, did not claim to be afraid, possibly for being more closely related to the scientific advancements when it comes to the cited pathology.

Considering the impact that this disease has in women, the possibility of losing her breasts and the impossibility of prevention, is it very important that women have knowledge about the pathology, the protecting factors and the methods to detect it in its early stages, avoiding premature deaths and the disadvantages of the curing therapies(4).

In this study, there was a low frequency of 9.6% of women who believed that they would never suffer from this disease, a piece of information that can be considered preoccupying, because the simple fact of being a woman constitutes the highest possible risk factor for breast cancer. This type of cancer is the malignant neoplasia of highest occurrence and highest lethality among Brazilian women, composing approximately 20% of the cases of neoplasia in women and 15% of their deaths(3).

The embarrassment or the dislike for touching herself was cited by 11 women, nine of which (21.9%) were community health agents and one (5.3%) was a licensed practical nurse. The human being must be seen biologically, psychosociologically and spiritually and must be capable of making decisions of their own about their lives and of developing and carrying out actions of self-care. By self-examining herself, the woman is able to better understand her body and so she must feel comfortable with herself.

BSE is an activity to be done by the woman throughout her whole life to maintain and promote her well-being, and when effectively done it may help maintain her integrity and contribute to the proper functioning of the organism.

Breast cancer is a disease which cannot be prevented, but its early detection favors excellent treatment possibilities, avoiding physical sequelae and emotional distress, difficulty to re-interact with the family, professionally and with other women. As a result, it is important that more health care professionals know about breast self-exam and make every possible effort to teach women to create and develop the habit of self-examining themselves(2).

Because the resources granted to the population are so restricted and limited, it is of prime importance to discover
strategies to correct this distortion and give women the means for early diagnosis of breast tumors. BSE is certainly one of the most important steps in identifying mammary tumors, mainly in populations of developing countries. Under these conditions, breast self-examination becomes an auxiliary method for the early detection of mammary neoplasia\textsuperscript{(17)}.

Nowadays, breast cancer is a pathology which becomes more and more common among women. Therefore, this type of cancer needs to be considered in its whole, because after the woman is stricken by it, not only her body is changed but also her corporal image and different aspects of her social and emotional lives\textsuperscript{(18)}.

The importance of this subject makes necessary for an ample discussion so people become fully aware of the meaning it has when a woman is sick from the very organ that makes her feel like a woman. It is something that is far from being simple, it is full of anguish and fear, but it must be taught little by little\textsuperscript{(18)} according to the experiences and life styles of each person.

In this study, it was observed that even though there is a percentage of 54.1\% of nursing professionals who perform BSE monthly, INCA highlights that this exam should not replace the clinical exam to be carried out by a health professional trained for this activity\textsuperscript{(4)}.

BSE is a practice which must be continuously stimulated and oriented by professionals from health areas, so the woman is better able to understand her own body and create the habit of examining herself. It is made evident that conscience on the matter is of the highest importance and for such there must be participation from all professionals related to it, from the users of the health services to community leadership to teach and expand the understanding and comprehension on breast self-examination\textsuperscript{(5)}.

**REFERENCES**


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