

## HEALTH EDUCATION NEEDS IN BREAST CANCER PREVENTION

Venter Alina \*, Adriana Pirte \*\*

\*University of Oradea, Faculty of Medicine and Pharmacy, 1 December, Oradea, Romania, e-mail:

[alinaventer@gmail.com](mailto:alinaventer@gmail.com)

\*\* e-mail: [pirte\\_adriana@yahoo.com](mailto:pirte_adriana@yahoo.com)

### Abstract

*Breast cancer continues to be a matter of great interest in increasing the frequency and the severity of its evolution in advanced stages of cancer in advanced stages of cancer. To diagnose the disease as early as possible is necessary to raise the level of education of the female population should lead to greater addressability its health services and increase their adherence to breast screening components.*

*The study is based on the application of a work questionnaire, structured on 35 items, with self-registration of the data, during 2012, on a targeted population of 212 women of 15-80 years of age, in Oradea. The study revealed the low level of Health education concerning the prophylaxis of the breast cancer, the need of educational programs structured on the theme mentioned above, the high implication of the medical staff toward the accomplishment of the optimal level of Health education and launching of a specific screening program for the early detection of the breast cancer.*

**Key words:** breast cancer, health education, desirable needs

### INTRODUCTION

Health education is an easy and relatively inexpensive means of prevention, successfully applicable to all age groups( Borzan C et al, 2002, Ancusa M, 1997).

Breast cancer continues to be a matter of great interest in increasing the frequency and the severity of its evolution in advanced stages of cancer in advanced stages of cancer. But, the diagnosis of the disease in early stages, the patient receiving effective treatment options, breast can be saved and is followed by the gain in survival with improved quality of life( Coldman A et al, 2007, Ciobanu V, 1997). To diagnose the disease as early as possible is necessary to raise the level of education of the female population should lead to greater addressability its health services and increase their adherence to breast screening components( Gotzsche PC et al, 2009, Dey P et al, 1997). Level of education is a determining factor for the maintenance and disease prevention and should be a priority health policy, preventive medicine is cheaper than curative medicine and its results can be very good in time( Hofvind S, 2006, Ivan A, 1993).

Activities designed to achieve this goal must meet the population's needs. Testing these needs implies the elaboration of questionnaires set up

for differentiated inquiries for the specific area intended for the launch of educational programs in the target population.

In breast cancer, the applicability of the concepts of health education regarding prevention and early detection, in early stages, makes possible a decrease in specific mortality with an increase of potentially gained years of life and of life standard. (Borzan C et al, 2007, Moss SM et al, 2006))

## **MATERIAL AND METHOD**

We have developed an original questionnaire on 35 items which was applied to a sample of 212 female subjects, from Oradea, aged 15-80 years, in 2012. The questionnaire was distributed through family physicians to the population over 20. For the population under 20, the data were collected through questionnaires given in schools during the class forums. The survey had the approval of the School Inspectorate, of the headmaster's office and of the subjects. We have not come across any case of refusal of completing the questionnaire.

Data obtained by self-recording were processed by statistical and mathematical methods. (Muresan P, 1989)

## **RESULTS AND DISCUSSIONS**

Breast cancer diagnosis supposes previous stages of establishing the suspicion of diagnosis based on symptoms and signs directing the physician for further medical investigation of the breast disease. Female population should recognize these signs so that in case of emergency they should resort to a specialized service in case of one or more symptoms.

Adequate prophylaxis is primarily based on the population resorting to health services, on its level of health education, determining the volume of felt needs addressed to and met by qualified medical assistance. (1)

In the study group, the main known symptoms of manifestation in the case of breast cancer are on rank I the breast nodule (55.93% of total responses), followed on rank II by pain (12.11%), other ranks refer to local deformation, sanguinolent mammary discharge, redness, which indicates a low level of knowledge of symptoms of suspected breast cancer.

The main reported sources of information regarding the symptoms and diagnosis of breast cancer in the study group were media for 45.32% of total responses, followed by far, with only 15.97%, by GPs, and then by friends, school and specialist doctors. Note that what should be the main source of information for the prophylaxis of such an important disease as breast cancer, the health system, the best qualified authority to provide

expert knowledge to a population with high risk of disease and death, is little involved in providing health education.

This confirms the reality of the Romanian health system, namely the low role of investments in health promotion and prevention with a disproportionate share of the curative sector to the prejudice of the preventive sector.

Methods for early detection of the disease known by the subjects are self-palpation (36.76% of total responses), mammography, ultrasound, CT. The analysis of these responses and the fact that 46.17% of the total responses show that subjects do not know or do not answer the question on early detection methods show the low level of health education of the population surveyed and the need for intensive educational programs for the female population from Oradea.

The same low level is found in the utility of the method of self-palpation in early detection of breast cancer. Thus, over 30% of total respondents claim that self-palpation is useful for detecting advanced stages of breast cancer or admit a total lack of information. (Fig.1)

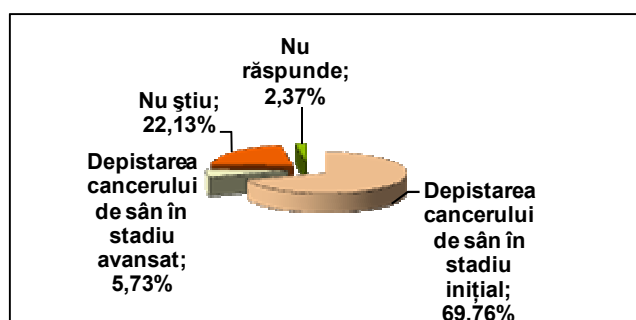


Fig nr 1 Weigh on the respondents according to their knowledge about the usefulness of breast self-palpation

The technique of self-palpation was learnt from the GPs (25.56% of total responses), relatives, specialist doctors, friends, to various extends.

For specialized literature, breast self-examination still represents a controversial topic, recommended by some authors, denied or even ignored by others.

Haaegensen believes that teaching women to examine their breasts is more beneficial for early detection of breast cancer than training doctors. At the opposite pole stands Francis D. Moore who, in an editorial in the New England Journal of Medicine, considers the method worthless. Differences

are not only at the level of personal opinions, but also at the level of studies on the population( Gotzsche PC et al, 2009 , Tabar L et al. 2003)

Inclusion or omission of self-examination in the model of prospective studies of early detection of breast cancer show the importance given to self-examination.

Asked about the most appropriate time for self-palpation, women in the study group show again a low level of health education. Over 55% of total responses admit that they do not know the answer to question or do not answer it. (Fig. 2)

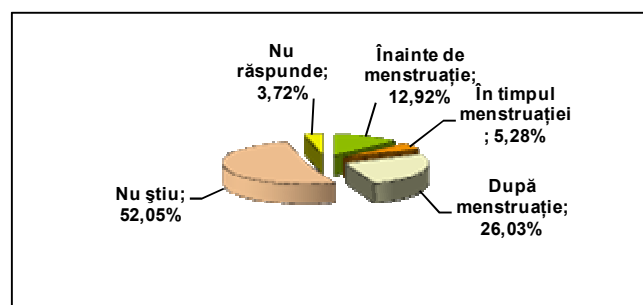


Fig nr 2 Weigh on the respondents according to their to the knowledge on breast self-palpation time to perform

Not even the answers that consider only one of the variants "after menstruation", "before menstruation" or "during menstruation" denote a more appropriate level of education for breast cancer prevention.

In the annual medical examination, the GP must conduct a special consultation. But for the results of such investigations to be useful, there should be an adequate compliance of the population and an appropriate addressability to health services. In our study, only half (50.99%) of the subjects say they come for the annual medical examination.

Physical examination of breasts is part of the medical examination, useful for early detection of early stages of breast tumours, which can be beneficial for the patient. It is low cost and has the orientative value of a screening test separating "likely" sick ones from "likely" healthy ones. 66.80% of the subjects declare that they have not been checked for breast cancer during the annual medical examination and 7.31% of them do not answer the question. Consequently, we can claim that over three quarters of respondents were excluded from the chance of early detection of breast cancer.

In the literature, classic, 50-70% of breast cancers were detected through self-palpation. The spread of mammography screening programs has led to the detection of the diagnosis in clinically unapparent phases with

impalpable injuries (Gotzsche PC et al, 2009, Coldman A et al, 2007). These programs give higher chances of early treatment, increase survival rate and offer patients another dimension of life standard.

Mammography is the examination of choice in case of malignant lesions. Mammography in patients under age 30 is rarely indicated because it is difficult to interpret it due to the dense structure of the mammary gland in younger patients (Thurfiel E, 2002, Forbes FJ, 1997).

78.74% of subjects were never recommended to perform a mammogram regardless of the age group.

An adequate level of health education involves a series of knowledge that enables patients to take an informed decision on certain investigations. (Borzan C, 2007, Ancusa M, 1998) Mammography is an examination indicated in a suspected tumour together with a set of examinations meant to set a diagnosis.

21.54% of the subjects declare they do not know or do not answer the question on the role of mammography as a medical test in detecting breast cancer.

30.00% of subjects say they are not aware of the appropriate age to perform a mammogram. (Fig. 3)

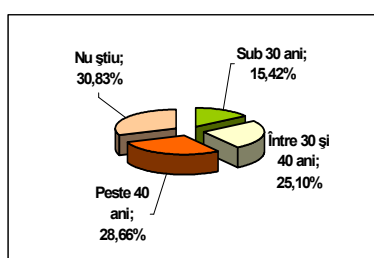


Fig nr 3 Weigh on the respondents according to age appropriate knowledge of performing a mammography.

The same alarming situation showing gaps in the subjects' health education is found in the regularity of recommending mammography examination: 33.00% of the study group say they do not know or do not answer this question. Their not answering can be interpreted as a lack of knowledge.

Unfortunately, not only the level of health education on prevention of breast cancer is low, but also medical intervention in these women is extremely poor, as proven by the 81.82% of the subjects who admit of never having performed a mammogram.

## CONCLUSIONS

1. The level of health education in preventing breast cancer in the study group is low.
2. Health education programs for this population should address methods of prevention and early detection of breast cancer, such as screening, focused on breast self-examination, mammography and other diagnostic means for breast cancer.
3. The role and involvement of medical staff in raising the level of health education should increase.
4. Given the low level of knowledge about breast cancer prevention, we consider screening as appropriate for the early detection of the disease alongside with the launch of new programs of health education whose themes should be based on testing specific educational needs.

## REFERENCES

1. Ancusa M., 1998, Educație pentru sănătate, Rev. Medicina Trecut Prezent Viitor, nr. 1, pag. 7-12
2. Borzan Cristina, 2002, Sănătate publică, Editura "Medicală Universitară "Iuliu Hațieganu", Cluj-Napoca
3. Borzan Cristina Maria, 2007, Noi abordari ale sanatatii publice si managementului in regiunea europeana a OMS, Editura medicala universitara „Iuliu Hatieganu” Cluj-Napoca.
4. Ciobanu V., 1997, Ghid de educație pentru sănătate. Ed. Mirton, Timișoara.
5. Coldman A, Phillips N, Warren L, Kan L., 2007, Breast cancer mortality after screening mammography in British Columbia women. *Int J Cancer*; 120: 1076-1080.
6. Dey P, Twelves E, Woodman CBJ, 1997, Breast cancer. Health care needs assessment. Radcliffe Medical Press Oxford and New York.
7. Forbes FJ, 1997, The incidence of breast cancer: The global burden, public health considerations in seminars in Oncology, 24; no 1, suppl 1, 1997: 20-35..
8. Gøtzsche PC, Nielsen M., 2009, Screening for breast cancer with mammography. *Cochrane Database Syst Rev*.
9. Hofvind S., 2006, Incidence of breast cancer before and after implementation of mammography screening [Tidsskr Nor Lægeforen](#). Nov 16;126(22):2935-8
10. Ivan A., 1993, Medicina omului sănătos. Editura Medicală, București.
11. Moss SM, Cuckle H, Evans A, Johns L, Waller M, Bobrow L; 2006, Trial Management Group. Effect of mammographic screening from age 40 years on breast cancer mortality at 10 years' follow-up: a randomised controlled trial. *Lancet*. 2006 Dec 9;368(9552):2053-60
12. Muresan P., 1989, Manual de metode matematice în analiza stării de sănătate. Editura medicală, București.
13. Tabar L, Yen MF, Vitak B, Chen HH, Smith RA, Duffy SW., 2003, Mammography service screening and mortality in breast cancer patients: 20-year follow-up before and after introduction of screening. *Lancet*. 2003; 361: 1405-1410.
14. Thurfiell ,2002,. Breast density and the risk of breast cancer, *New England Journal of Medicine*, 347: 866.