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Prophylaxis of breast cancer among women over 35

Preventive actions, including the ones aiming at an early detection of pathological changes in breasts, have become a significant issue in the treatment and further prognosis. Each year nearly 10,000 new cases of malignant breast cancer are registered and this number is constantly increasing. Not so long ago, in 1975, breast cancer was the second most frequent malignant tumour among Polish women, currently it is the most frequent one. It accounts for 17% of the total cases of diseases and for approximately 14% of the total deaths (1, 2, 3, 4). The risk of breast cancer increases with age. Among women under 20 this tumour is diagnosed exceptionally rarely. The incidence of malignant breast cancer increases rapidly in women over 35, and the high rates of incidence are observed until old age (2, 5, 6).

The early detection of the changes in breast gland is extremely significant for the effective treatment. Unfavourable statistics are connected with a delayed detection of cancer, which makes launching radical therapy impossible and is diagnostically unsuccessful. The detection of changes in breast is possible mainly owing to the active attitude of women. The awareness and appropriate knowledge of women is their only way to act against this dangerous disease and, combined with the proper preventive actions, it can contribute to avoiding the development of the disease and its dangerous consequences. Therefore, the co-operation of women with medical staff is essential in order to take actions in the field of widely understood oncologic prophylaxis, which consists of prevention, i.e. primary prophylaxis and early detection, i.e. secondary prophylaxis (7, 8). The indispensable condition is thus broad educational activity combined with the programme of diagnostic examinations, which can contribute to the reduction of the sick rate of tumour diseases and the improvement of treatment results (9).

The idea of this study originated due to the increasing danger that more and more women are faced with. The aim of the study was to evaluate the level of knowledge and behaviours of women over 35 connected with breast cancer prophylaxis.

RESEARCH METHOD

The researchers used the method of representative study, and the research instrument was the self-made survey questionnaire based on the literature on the subject. The survey questionnaire was supplemented with the chart for the self-evaluation of the risk of breast cancer designed according to the guidelines of the Polish Foundation of the European School of Oncology. The survey was conducted from April to November 2002 among 300 women aged 35–60. The questionnaires were anonymous and voluntary for the patients of medical clinics in Lublin, Gorlice and Rzeszów. 100% of the questionnaires were qualified for the analysis.

RESULTS AND DISCUSSION

The population under survey included women aged 35–60. The biggest group was made up by the respondents of the age group from 35 to 43 (46%). Women aged 44–52 accounted for 33% and women aged 53–60 – for 21% of the total. The vast majority of the respondents are the residents of towns (46%), followed by the residents of voivodship cities (30%) and the residents of the country areas (24%). The majority of the women under survey (58%) had secondary education, while 22% of women had university education and 20% had vocational education.

The survey questionnaire was supplemented with the chart for self-evaluation of the risk of breast cancer, designed according to the guidelines of the Polish Foundation of the European School of Oncology, and the obtained results allowed for the estimation of the risk of breast cancer in the population under survey. According to the given scale, 83% of women have low risk of breast cancer, 6% – medium, 2% – increased, while 2% – high risk of breast cancer.

The questions included in the questionnaire were supposed to evaluate the basic knowledge of women on the rules of breast cancer prophylaxis, including the rules of self-examination by women. What is of great significance in tumour detection is a systematic observation and self-examination by women who are able to detect early changes in their breasts. Breast self-examination makes an inexpensive and simple method of early detection of tumours. According to the prophylaxis principles, the self-examination should be performed by all women over 20, once a month, preferably 2–3 days after the menstruation (or systematically once a month by women who do not menstruate), as this is the period when breast are affected by hormones only to a very small degree. Breast self-evaluation should be part of hygienic habits. Obviously, such an examination will not bring results unless the women who have detected a tumour consult the doctor. Unfortunately, a high percentage of women (approximately 70%) delays their visits at the doctor's. Breasts make up a strong attribute of femininity, which makes the fear of mastectomy stronger than the fear of the dangers of the disease. It is both fear and other reasons that are responsible for the fact that women with breast cancer often start their treatment at the advanced stage of the tumour (10, 11). The significance of this examination should, therefore, be spread as it accounts for 90% of the detections of changes in breasts.

Clinical breast examination should be performed by the qualified medical staff. According to the recommendations of the specialists, every woman aged 20–40 should undergo such an examination once every three years, while women over 40 – once a year. What is of great significance here is the attitude and awareness of this examination among women. The knowledge of the rules of breast self-examination in the population under survey is not satisfactory. The question what age should be the starting point for the self-examination was answered correctly as 20 years of age by 51% of the total. 32% of the respondents claimed that such an examination should be performed after 30, 10% maintained that women should perform breast self-examination after giving birth to a child, while for 7% the lower age limit for the systematic breast examination was the period of menopause.

The suitable time for breast self-examination was also unknown to the large percentage of the respondents. Only 45% of the women determined the time correctly as the period a few days after the menstruation. The remaining ones gave wrong answers. The level of knowledge on the subject was positively correlated with the education of the subjects. The larger percentage of women with university education (55%) gave a correct answer concerning the recommended period of menstrual cycle to perform breast self-examination as compared with the women with secondary (44%) and vocational education (40%). The knowledge of the rules of breast self-control should be compatible with specific actions. Unfortunately, only 30% of the subjects admit they have systematic breast examination every month. The remaining ones do it unsystematically (57%), while 13% do not examine their breasts at all. No significant differences have been found as for the frequency of breast self-examination according

to the age of women. It is performed slightly more frequently by women between the age of 53 and 60 (31%) than by younger women (29%) – Table 1. As far as the residence is concerned, women who live in big voivodship cities perform regular breast examination more often (38%) than town residents (27%) and country residents (25%) – Table 2.

Table 1. Regularity of breast self-examination vs. age of respondents

Performing breast self-examination by women	n	%	Age groups					
			35-43		44-52		53-60	
			n	%	n	%	n	%
• Regularly every month	89	30	40	29	29	29	20	31
• Irregularly, occasionally	172	57	75	55	62	63	35	55
• Do not perform at all	39	13	22	16	8	8	9	14
• Total	300	100	137	100	99	100	64	100

Table 2. Regularity of breast self-examination vs. residence

Performing breast self-examination by women	n	%	Residence					
			voivodship city		towns		country areas	
			n	%	n	%	n	%
• Regularly every month	89	30	34	38	37	27	18	25
• Irregularly, occasionally	172	57	41	46	85	61	46	64
• Do not perform at all	39	13	14	16	17	12	8	11
Total	300	100	89	100	139	100	72	100

The respondents who admitted to monthly breast self-examination prevailed among women with university education (35%) as compared with women with secondary (31%) or vocational education (23%) – Table 3. Professional activity did not influence the frequency of breast examination. The reasons for avoiding self-examination included fear (31%), inability to recognize changes in breasts (15%), conviction that medical examination is sufficient (12%), while 11% claimed they had too little knowledge on the subject. Only 1.7% of the respondents mentioned lack of time or laziness as the reasons for avoiding self-examination. Eighty-seven women (29%) regarded all the reasons mentioned above as the explanation of the renunciation of breast self-examination. On the basis of the answers to the question concerning clinical breast examination by doctors, we can estimate the level of preventive actions against breast cancer as unsatisfactory. The vast majority of women (81%) have not had the clinical examination done by a general practitioner, and 39% – by a gynecologist.

Table 3. Regularity of breast self-examination vs. education of women

Performing breast self-examination by women	n	%	Education of respondents					
			vocational		secondary		university	
			n	%	n	%	n	%
• Regularly every month	89	30	12	20	54	31	23	35
• Irregularly, occasionally	172	57	32	53	104	60	35	54
• Do not perform at all	39	13	16	27	16	9	8	11
Total	300	100	60	100	174	100	66	100

What is of great importance in the early detection of breast cancer is the screening examination using mammography as a diagnostic test, which could save lives of about 2,000 women every year and contribute to the decrease in social and economic costs of breast cancer prevention (4). In the survey group only 20% of the total undergo mammography regularly, once every two years; 8% of the women under survey have mammography done more seldom than every two years. Nearly a half of the respondents (49%) have never had mammography done. 67% of the women aged 35–43 and 40% of the respondents at the age group between 44 and 52 do not have this examination done at all. On the other hand, the largest group of women who undergo mammography regularly every two years were the women aged 53–60 – Table 4.

Table 4. Frequency of mammography vs. age

Frequency of mammography examinations	Age groups						n	%
	35–43		44–52		53–60			
	n	%	n	%	n	%		
• Yes, regularly every two years	17	12	19	19	23	36	59	20
• More seldom than every two years	8	6	13	13	2	3	23	8
• Have been once	20	15	28	28	21	33	69	23
• Do not have tests done	92	67	39	40	18	28	149	49
Total							300	100

The residents of big cities undergo systematic examinations more frequently as compared with those living in towns and country areas. A larger percentage of the residents of country areas do not have mammography done compared with the residents of the cities where the access to this kind of tests is undoubtedly easier – Table 5. The frequency of mammography tests is positively correlated with the level of education of the respondents, which can be explained with the more extensive knowledge and higher awareness – Table 6.

Table 5. Frequency of mammography vs. residence

Frequency of mammography examinations:	Residence						n	%
	voivodship city		towns		country areas			
	n	%	n	%	n	%		
• Yes, regularly every two years	23	26	22	16	14	19	59	20
• More seldom than every two years	8	9	14	10	1	1	23	8
• Have been once	13	15	37	27	19	26	69	23
• Do not have tests done	45	50	66	42	38	54	149	49
Total							300	100

Table 6. Frequency of mammography vs. education level

Frequency of mammography examinations	Education of respondents						n	%
	vocational		secondary		university			
	n	%	n	%	n	%	n	%
• Yes, regularly every two years	6	10	36	21	16	25	59	20
• More seldom than every two years	0	0	16	9	7	11	23	8
• Have been once	21	35	37	31	11	17	69	23
• Do not have tests done	33	55	85	49	31	47	149	49
Total							300	100

Analyzing the dependence between professional activity and the frequency of screening examinations, it turned out that working women more seldom undergo systematic mammography (Table 7).

Table 7. Frequency of mammography vs. professional activity

Frequency of mammography examinations:	Professional activity								n	%
	yes, I am professionally active		no, I do not work		unemployed		housewives			
	n	%	n	%	n	%	n	%	n	%
• Yes, regularly every two years	33	18	20	21	2	25	4	10	59	20
• More seldom than every two years	16	9	6	6	1	11	0	0	23	8
• Have been once	40	22	23	24	4	17	2	35	69	23
• Do not have tests done	90	51	45	49	6	47	8	55	149	49
Total									300	100

Check-up visits and specialist examinations were more frequently performed in women with the increased or high risk of breast cancer. Participation in diagnostic examinations was usually connected with women's self-initiative (24%) or with doctor's advice (14%). Only 5% of the total population of women underwent the examination on the initiative of their employers who contributed to organizing this kind of preventive actions. What is upsetting is the fact that 57% of the subjects have never participated in this kind of examinations. One of the reasons for this fact can be poor accessibility to such examinations. Only 30% of the surveyed population positively evaluated the accessibility to these examinations as far as the time of waiting was concerned. Negative opinions of 29% of the respondents were connected with the long period of waiting for the examination, while 11% of such opinions were connected with the long distance from their home to the specialist clinics. 30% of the women did not give any opinion on the subject.

The reason for the unsatisfactory level of prophylactic actions against breast cancer is the restricted participation of medical staff in the education of patients. The most important information about preventive actions comes from mass media, only to a small extent – from the health service personnel.

CONCLUSIONS

1. The level of knowledge of the risk factors and symptoms of breast cancer among the surveyed group of women is not satisfactory. Despite the declared knowledge, the actual knowledge of the rules of breast self-examination is unsatisfactory as far as the age and the suitable period for regular performance of such examination is concerned. More than a half of the respondents (55%) cannot indicate the proper period of the menstrual cycle for self-examination.

2. The actions taken by women to prevent breast cancer are unsatisfactory. Only 1/3 of the respondents (30%) perform regular, monthly breast self-examination, while 13% do not examine their breasts at all. Only 20% of the women under survey undergo mammography regularly every two years, while nearly a half (49%) have not had this examination done at all.

3. Prophylactic actions are more frequently taken by women with university education, residents of the city areas and not active professionally. Regular check-up visits and specialist diagnostics are frequent among the women who belong to the group of high risk of breast cancer.

4. The participation of general practitioners and gynecologists in prophylactic examinations and education of the patients is unsatisfactory.

5. The demand for health education concerning early breast cancer detection is large and the promotion of the knowledge is necessary as the information on the subject is insufficient, which was emphasized by more than a half of the women under survey.

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SUMMARY

In recent years, the increase in incidence of malignant tumours of breast has been observed in Poland. Every year approximately 10 thousands of new cases of breast cancer are registered. 19 per cent of all women afflicted with malignant neoplasms suffer from breast cancer. According to considerable experience of the western countries, prophylaxis combined with screening examinations is the most effective and, also, the cheapest method of fighting against neoplasm. In the face of steadily growing danger, which affects more and more women, an attempt to assess the knowledge and behaviour towards prophylaxis of breast cancer among women over 35 was made. The researches, carried out between April and November 2002, were conducted with the use of our own questionnaire basing upon literature on the subject. The poll was intended for women aged between 35 and 60. The group of 300 women, who live in the south-east part of Poland, was surveyed. A detailed analysis of the data revealed that almost 50 per cent of women know the rules of preventive actions in the spheres of breast self-control and mammography. The level of knowledge of primary prophylaxis correlates with the level of education of women. The higher is education, the greater is knowledge about the risk factors of breast cancer. The highly educated women more often and more systematic take preventive actions leading to early detection of breast cancer. The women in the 35–45 age group more regularly and more often perform monthly breast self-control. Also the fact of the prevalence of breast cancer in the members of the polled women's families raises the discipline of performed examination.

Profilaktyka raka piersi wśród kobiet po 35 roku życia

W ostatnich latach obserwuje się w Polsce wzrost zachorowalności na nowotwory złośliwe piersi. Każdego roku rejestruje się blisko 10 tysięcy nowych zachorowań. Rak sutka stanowi 19% wszystkich zachorowań na nowotwory złośliwe u kobiet. Jak wykazały doświadczenia krajów zachodnich, profilaktyka połączona z badaniami przesiewowymi jest najskuteczniejszą i zarazem najtańszą metodą walki z nowotworami. Wobec stale rosnącego zagrożenia, w którego obliczu staje coraz więcej kobiet, podjęta została próba oceny poziomu wiedzy i zachowań wobec profilaktyki raka piersi wśród kobiet po 35 roku życia. Jako narzędzie badawcze w niniejszej pracy zastosowano kwestionariusz ankiety własnej konstrukcji, opracowany w oparciu o literaturę przedmiotu. Badania zostały przeprowadzone w okresie od kwietnia do listopada 2002 roku. Ankieta skierowana była do kobiet w wieku między 35 a 60 rokiem życia. Badaniami objęto grupę 300 kobiet zamieszkujących południowo-wschodnią część Polski. Były to mieszkanki województw lubelskiego, małopolskiego i podkarpackiego. Na podstawie przeprowadzonej analizy można stwierdzić, iż blisko 50% ankietowanych zna zasady przeprowadzania badań prewencyjnych, zarówno w zakresie samokontroli piersi, jak badań mammograficznych. Poziom wiedzy na temat zasad profilaktyki raka sutka koreluje z poziomem wykształcenia kobiet. Im wyższy poziom posiadanego wykształcenia, tym znajomość czynników ryzyka raka sutka większa. Wśród kobiet z wykształceniem wyższym podejmowane są częstsze i bardziej systematyczne badania, mające na celu ewentualne wczesne wykrycie zmian nowotworowych. Kobiety w młodszych grupach wiekowych od 35 do 45 roku życia częściej i w sposób bardziej systematyczny prowadzą samobadanie sutków. Także fakt występowania raka sutka wśród członków rodziny ankietowanych kobiet sprawia, że dyscyplina przeprowadzanych badań profilaktycznych jest większa niż wśród pozostałych, bez rodzinnego obciążenia.