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Self-assessment of the health status of women diagnosed with breast cancer after surgery

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Abstract

Introduction. Breast cancer is the most common malignancy in women in the world. Symptoms, the extent and severity of the disease process, as well as the consequences of treatment, cause unpleasant symptoms and limitations resulting from the disease. **The aim** of the study was to present the self-assessment of the health status of women diagnosed with breast cancer and surgically treated.

Materials and methods. The study was conducted on 121 women after surgery for breast cancer in the Podkarpackie Oncological Center in Brzozów. The diagnostic survey method was used along with the original questionnaire.

Results. Women who underwent a breast-saving surgery usually assessed their overall health at a good level, while respondents after breast amputation were at a sufficient level. The self-esteem of mental health of the examined women was similar.

Conclusions. In the examined group there were differences in the assessment of health condition depending on the type of surgical intervention. Almost all patients diagnosed with breast cancer believed that health problems limited their functioning.

Key words: breast cancer, sequelae, self-esteem, health status.

Introduction

Breast cancer in Poland constitutes about 17% of all malignant tumors in women. The disease most often affects individuals aged 50-69, but also younger and older women. The process of neoplastic growth leads to a reduction in the efficiency and efficiency of the body, and is the reason for the occurrence of health problems. Already at the stage of diagnosing breast cancer, there is anxiety and fear for life, not only in the patient, but also in her immediate environment [1]. During the period of treatment of the disease there are additional side effects of anti-cancer therapy. Breast cancer requires systemic treatment and surgical treatment consisting in performing a breast-saving or mastectomy procedure. Breast amputation seen as an attribute of motherhood and femininity causes particularly negative consequences in the physical, psychological and social sphere of a sick woman.

The aim of the study was to present the self-assessment of women's health after surgical treatment for breast cancer.

Materials and methods

The study was conducted on 121 women who were under treatment or under control after undergoing surgery for breast cancer in the Oncological Outpatient Clinic of the Podkarpackie Oncological Center of Ks. B. Markiewicz in Brzozów. The women qualified for the study expressed their consent to fill in a questionnaire of 25 questions. The questions concerned demographic and social data, women's concerns after the diagnosis of breast cancer, the impact of surgery on selected spheres of women's life and emotional problems as well as self-esteem of health. The tests were carried out using the diagnostic survey method. SPSS v. 17.0 was used for statistical analysis. A p value <0.05 was considered statistically significant.

Results

In the examined group of individuals diagnosed with breast cancer the most, because 28.9% of women were in the 46-55 age range. Then, in an equal percentage - 20.7% of respondents were women aged 36-45 and 56-65. Nearly a fifth of women were included in the oldest age group, 66 years and more (19.6%), while the smallest group were youngest women, aged 25-35 (10.7%). 62.0% of respondents were married, 19.8% were widows, and 12.4% were women. The smallest share was held by divorced persons and women in a partnership - respectively 4.1% and 1.7% of all respondents. Most were women who had secondary education (35.5%). The second largest group were individuals with higher education (31.4%).

The next two groups with lower and similar shares had vocational (17.4%) or basic (15.7%) education. Most of the women were urban dwellers (60.3%), while in the city up to 30,000. 38.8% of respondents lived in the city, and in the larger city, 31 thousand. up to 50,000 21.5% of the respondents lived in the town. The number of women working professionally before the diagnosis of cancer and at the current stage of treatment was significantly different. Before the diagnosis of active breast cancer, there were 73.6% of respondents, while at the current stage of therapeutic or health monitoring, professional work was performed by 48.8% of the respondents.

In all the examined women, surgical treatment was performed consisting in performing a breast-saving or mastectomy surgery. The breast-saving surgery was performed in 57.9% of the respondents, the remaining 42.1% of women underwent mastectomy. The vast majority (90.9%) of patients during the research were undergoing oncological treatment, the remaining 9.1% of the respondents ended the treatment, but remained under constant control of the oncological clinic. The largest number of women undergoing treatment were during chemotherapy - 74.4% of the respondents, much less, because 14.9% of the respondents underwent radiation therapy. Physical rehabilitation covered 28.9% of sick women.

The respondents self-assessed the general state of health. Most women rated their health status as good (43.0%), and fewer respondents thought that their health was at a sufficient level (39.7%). A much smaller group defined their overall health on the adopted scale in the insufficient category (9.9%). The group of 7.4% of respondents assessed their health at a very good level (Table 1).

Table 1 Self-assessment of the general health condition of the examined women, taking into account the type of breast surgery performed

Self-assessment level		Type of operation		Total
		Mastectomy	Saving operation	
Very good	N	2	7	9
	%	3,9	10,0	7,4
Good	N	20	32	52
	%	39,2	45,7	43,0
Sufficient	N	25	23	48
	%	49,0	32,9	39,7
Insufficient	N	4	8	12
	%	7,8	11,4	9,9
Total	N	51	70	121
	%	100,0	100,0	100,0
p=0,25				

Among those who had a breast-saving surgery, the majority were those who assessed their health at a good level (45.7%). Nearly the third part of this sub-population stated that their health was sufficient (32.9%). On the other hand, women after mastectomy most often assessed their health condition in the sufficient category (49.0%). The second group were women who determined their health at a good level (39.2%). The highest level of the assessment was more often in the case of individuals who underwent a saving operation than individuals after mastectomy - 10.0% against 3.9%. Self-assessment of health at an insufficient level was more often issued by respondents who had a saving surgery compared to those after mastectomy - 11.4% compared to 7.8%. There were no significant differences in the assessment of health condition depending on the type of surgery performed by the investigated women ($p = 0.25$) - Tab. 1.

The respondents self-assessed the state of mental health. Similarly to the above-mentioned assessment, the largest groups of respondents stated that their mental health was at a sufficient (43.0%) and good (38.0%) level. At the very good level, only 5.0% of patients rated their mental health, while 14.0% of respondents described it as inadequate (Table 2).

Table 2 Self-evaluation of the mental health status of the examined women, taking into account the type of breast surgery performed

Self-assessment level		Type of operation		Total
		Mastectomy	Saving operation	
Very good	N	3	3	6
	%	5,9	4,3	5,0
Good	N	17	29	46
	%	33,3	41,4	38,0
Sufficient	N	25	27	52
	%	49,0	38,6	43,0
Insufficient	N	6	11	17
	%	11,8	15,7	14,0
Total	N	51	70	121
	%	100,0	100,0	100,0
p=0,63				

Women after mastectomy most often (49.0%) assessed their mental health at a sufficient level, the third part (33.3%) of respondents rated it at a good level. Every tenth (11.8%) of the respondents believed that her mental health condition was insufficient, the least number of women (5.9%) assessed their health in the psychological sphere as very good. On the other

hand, the percentage of individuals (41.4%) in whom their mental health was good was the highest among women who had a breast-saving surgery performed. A slightly smaller group (38.6%) described them at a sufficient level. The next group consisted of individuals who assessed their psychological state of health as insufficient (15.7%), and the smallest women, in the opinion of whom he was very good (4.3%). Despite the differences in the self-assessment of mental health by the examined women, no significant statistical differences were found, depending on the type of surgery performed ($p = 0.63$) - tab. 2.

Surgical treatment of breast cancer may be a consequence of early and late disorders, mainly in the mental sphere. For 75.2% of the surveyed women, the operation had negative consequences in the form of lowering the sense of femininity in them. The group of 68.6% of respondents experienced a lower level of satisfaction with their own body as a result of surgical treatment, and 57.9% of women indicated a lower self-esteem. For 55.4% of the respondents, the surgery had an effect on the sexual dysfunction, and for 44.6% of the respondents it was the reason for the reduction of interest in the partner (Table 3).

Table 3 Consequences of surgery in selected areas of women's life

Sphere	Category	N	%
A sense of femininity	yes	91	75,2
	no	30	24,8
Satisfaction with your own body	yes	83	68,6
	no	38	31,4
Lowering your self-esteem	yes	70	57,9
	no	51	42,1
Sexuality	yes	67	55,4
	no	54	44,6
Lowering of partner's interest	yes	54	44,6
	no	67	55,4

Breast cancer is a huge health problem for a woman affected by this disease, especially diagnosed to an advanced degree, due to the unpredictable effects of treatment and a very uncertain prognosis as to the time of survival. In addition to health problems, the disease generates many other problems and fears leading to changes in the functioning of women at the level of life in the environment, including relationships in the family and the environment. All examined women were asked about the types of problems associated with breast cancer. Problems have been categorized into three thematic groups, i.e. concerns of women after

breast cancer diagnosis, emotional problems, and the impact of health problems on everyday functioning. In the first group of problems, women most often pointed to the severity of health problems (28.9%). Similarly, respondents often feared pain (22.3%) and reduced physical fitness (20.7%). Lesser percentages of people were afraid of treatment (14.0%), expressed concern about the lack of acceptance by the family / partner (9.1%) and psychological problems (5.0%) - tab. 4.

All women surveyed mentioned emotional problems. The fourth part of the respondents suffered depression and powerlessness (24.0%) due to the disease. Fewer women suffered from insomnia (22.3%). Nearly a fifth of respondents (19.8%) listed emotional problems with feeling of nervousness and the same group of patients (19.0%) reported feeling irritable and having problems concentrating. With the diagnosed disease, 14.9% of the surveyed women associated problems of isolation from the environment (Table 4).

Table 4 Concerns and types of problems encountered in women diagnosed with breast cancer

Fears /problems	Category	N	%
Concerns of women after breast cancer diagnosis	Increased health problems	35	28,9
	Fear of treatment	17	14,0
	Ache	27	22,3
	The occurrence of psychological problems	6	5,0
	Limitation of efficiency	25	20,7
	No acceptance from the family / partner	11	9,1
	Total	121	100,0
Emotional problems	The feeling of irritability and problems with concentration	23	19,0
	Insomnia	27	22,3
	Depression, powerlessness	29	24,0
	Isolation from the environment	18	14,9
	Nervousness	24	19,8
	Total	121	100,0
The impact of health problems on daily functioning	Never	1	0,8
	Every now and then	62	51,3
	Often	43	35,5
	Very often	15	12,4
	Total	121	100,0

In the opinion of more than half of the surveyed women (51.3%) their health problems from time to time affected their daily functioning. The second group were respondents (35.5%), for

whom the health problems associated with breast cancer were the reason for frequent limitations in everyday functioning, while the occurrence of restrictions determined as very common concerned 12.4% of women. Only one respondent was of the opinion that health problems had no impact on everyday functioning (Table 4).

Discussion

The diagnosis of breast cancer brings a sense of danger and disturbs the lives of the affected women. Therapeutic treatment is aimed at treating a sick woman, but also causes negative consequences. General physical well-being affects the mental and social state of women, mobilizes or discourages the fight against the disease.

Kozieł et al. [2] drew attention to the emotions of women associated with breast cancer. They emphasized that they were due to the severity of the disease process, the need for long-term treatment and uncertainty about the effects of therapy. They found that 31% of women felt anxiety in connection with the disease and 16% suffered from depression. In our own research, after diagnosing breast cancer, women were afraid of worsening health problems (28.9%), pain (22.3%), and reduced fitness (20.7%). They were also afraid of treatment (14.0%), they feared a lack of acceptance from close relatives (9.1%) and psychological problems (5.0%). In addition, they felt depressed and powerless (24.0%), insomnia (22.3%), nervousness (19.8%), feeling irritable, problems with concentration (19.0%), and isolated from the environment (14 , 9%). In earlier studies by Cipora et al. [3], after receiving information about the necessity of mastectomy, women felt fear (58.3%), anxiety (43.5%) and resignation (21.3%). In the study by Musiał et al. [4] 41.4% of women after mastectomy were afraid of death, 38.0% of respondents were afraid of loss of attractiveness, and 30.0% of respondents feared loss of femininity. On the other hand, 20.0% of women were afraid of partner's lack of acceptance. Only 1.4% of patients did not report any concerns about the disease and the treatment process. Mroczek et al. [5] in their study found that 38.0% of respondents felt terrified when diagnosed with breast cancer, 24.3% fear of death, 18.4% anger, 14.6% women were depressed, 13.6 % was angry. In Groszek et al. [6], not much more than half of the respondents (52.5%) were of the opinion that due to their illness, they sometimes experienced a reduced mood, sadness and depression, and almost a quarter of women believed that these emotions accompanied them often. In these studies, it was found that breast removal surgery affected the physical and emotional state of women. According to Zdonczyk [1], breast amputation women had a tendency to suppress emotion, depression and anger. Sobieralska-Michalak et al. [7] showed that the vast majority of women diagnosed with

breast cancer (about 95%) achieved average and high level of anxiety severity as a condition. In these studies, there was no statistically significant difference between the severity of anxiety and depressed mood due to the type of breast surgery performed. It can be explained by the fact that regardless of the type of surgery - breast amputation or breast-saving surgery, all respondents were afraid of diagnosing breast cancer. In a study by Tatala et al. [8], it was found that a reduced mood may cause less motivation for women to fight breast cancer and unwillingness to undergo radiotherapy or chemotherapy. However, in studies by Wałęcka et al. [9], it was shown that women who underwent mastectomy manifested greater self-confidence, openness, activity, trust in interpersonal contacts, ability to better adapt to the environment and persistence in achieving the goal in comparison to healthy women. . According to the authors, this may have resulted from the fact that the Amazons were keen to let others perceive them as attractive, well-groomed and accepted by their surroundings.

Rocławska [10] in her research showed that patients before the breast removal surgery were satisfied with life and ready to act. However, after three months post mastectomy they had a depressive mood, they were fearful and withdrawn. In addition, in the above studies, a statistically significant relationship was found between the quality of life of women after mastectomy and their state of health. Better health influenced a better quality of life, and poorer health deteriorated the quality of life. In their studies, Zdończyk [1] and Zegarski et al. [11], who confirmed the dependence of the quality of life of women on the type of surgery - the more extensive surgery, the lower the quality of life. Similar results were presented by Kaminska et al. [12] who proved that patients after mastectomy had a lower quality of life compared to patients who had a breast-saving surgery. Different results were obtained in their studies by Słowik et al. [13], in which there was no statistically significant relationship between the type of surgery performed in the breast and the average general quality of life of the respondents. However, there was a statistically significant relationship between some of the somatic breast complaints, including the type of surgery.

In studies by Koziół et al. [2], women with breast cancer rated their quality of life in the environmental area (15.04), then in social (14.98), psychological (14.29), and much worse in the area of somatic (12,39). In own studies, among respondents who declared their professional activity before the diagnosis of the disease, 66,3% of women after surgical treatment of breast cancer resumed their professional work. Similar results were presented by Ridan et al. [14] who stated that more than 70% of respondents returned to professional work after unilateral mastectomy. Ridan et al. Stated that mastectomy limits women in professional and private functioning because it results in reduced mobility. Groszek et al. [6] in a study

conducted among 40 randomly selected post-mastectomy women found that more than half of the respondents (55%) had their lives changed to worse, in 35% women had no impact on quality of life, and every tenth examined the woman was of the opinion that the disease had a good effect on their lives because it had changed for the better.

Self-esteem of health reflects, to a certain extent, the well-being of ill women. In the own research, the largest group of respondents - 43.0% assessed their overall health condition as good. In the opinion of 39.7% women, overall health was defined at a sufficient level. Significantly smaller groups of respondents assessed this state of health as very good and insufficient - respectively 7.4% and 9.9% of patients. In earlier studies by Cipora et al. [3] performed in the same Center, as in the presently presented studies, the largest group - 58.3% of respondents - determined their health at good level and 29.6% at a sufficient level. This state of health was rated very well by 7.4% and insufficiently by 4.6% of women. The studies by Mroczek et al. [5] showed that the influence on the self-esteem of women after mastectomy had negative emotions resulting from fear of life and a sense of loss after removal of the breasts. In Zdończyk's study [1] it was found that breast amputation and adverse effects of therapy affected the perception of one's own appearance, which translated into self-esteem by the respondents. Awick et al. [15] and Bauman et al [16] pointed out the importance of physical activity as a factor influencing the self-esteem of women with breast cancer. The results of their research indicate that the self-esteem of women can be improved through systematic physical activity.

In own studies, the surgical treatment of breast cancer in the vast majority of respondents (75.2%) contributed to the reduction of their sense of femininity and satisfaction with woman's own body (68.6%). In addition, in most respondents (57.9%) decreased self-esteem, and in opinion 55.4% had an impact on sex life. In the study of Musiał et al. [4], 30.0% of the subjects after mastectomy had a reduced sense of femininity, and 8.6% were afraid of taking sexual intercourse. The lack of a sense of own attractiveness concerned 25.7% of the respondents. In our own studies, there was no statistically significant relationship in the self-assessment of the general health condition of ill women, taking into account the type of breast surgery performed, but some differences were found in this respect.

Conclusions

1. Health problems were limiting the everyday functioning of almost all patients diagnosed with breast cancer. Women most often feared the severity of problems and the resulting difficulties, despondency and powerlessness.

2. The respondents associated the surgery with the occurrence of disorders in the mental sphere. Most often they were: lowering the sense of femininity, dissatisfaction with one's body appearance and lowering one's self-esteem.
3. There were differences in the self-assessment of health depending on the type of surgical intervention. Women after mastectomy were more likely to assess overall health in a worse category (sufficient level) than respondents after a saving operation (good level). This tendency was also maintained in the self-assessment of mental health.
4. The level of health assessment by the surveyed women, the types of health problems and the lack of professional activity in more than 1/3 of respondents, testifies to insufficient level of rehabilitation as a full medical and social process.

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