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Selected determinants of strategies to cope with the disease among women treated for gynecological cancer

Abstract

Introduction. The cancer of the reproductive organ, due to its specificity, is an extremely difficult situation for a woman.

Aim. The aim of the study was to answer the question what are the determinants of strategies to cope with the disease among women treated for cancer of the reproductive organ.

Material and methods. The study included 102 women treated for gynecological cancer. To assess coping strategies with disease, denoting adaptation to cancer, a Mini-Mac standardized scale of the Mental Adjustment to Cancer Diseases and the own construction questionnaire were used. Statistical analysis was performed using Chi² test, Mann-Whitney U test, W. Shapiro-Wilk, Kruskal-Wallis tests.

Results. Research shows that most respondents coped with the disease using the strategy: the fighting spirit (FS), and positive reevaluation (PR), but to a lesser degree they applied preoccupation with anxiety (PwA) and helplessness – hopelessness strategy (HH).

Conclusions. 1. Most of the women fighting against cancer used constructive strategies, while the remaining part – the destructive ones. Choosing the type is determined by factors like the duration of the disease, the incidence of complications during treatment, subjective evaluation of how to improve the health status and satisfaction with treatment or length of hospital stay. 2. Strategies of mental adaptation significantly affect the course of treatment. The use of absorbing anxiety causes significantly more women not to feel the improvement of health and hospitalization for them is a traumatic experience. In contrast, a form of helplessness – hopelessness is associated with low satisfaction with treatment, and lack of improvement in subjective health. People who use fighting spirit were significantly more satisfied with the results of treatment.

Keywords: gynecological cancer, coping strategies.

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INTRODUCTION

Cancer causes negative emotions in every human being, and despite the undoubted successes of oncology, it is still perceived as fatal. It is associated with pain, failure, hopelessness and tragedy. Cancer of the reproductive organ due to its specificity, is an extremely difficult situation for a woman. The sick woman creates her own personal image of disease, ranging from diagnosis through the entire therapy. In the treatment process, it is important to learn how to function with the illness, how to attain the recovery and how to develop a style of coping with difficulties [1-3].

AIM

The aim of the study was to answer the question what are the determinants of strategies to cope with the disease among women treated for cancer of the reproductive organ.

MATERIAL AND METHODS

The study included 102 women treated for gynecological cancer in the Independent Public Clinical Hospital No. 4 in Lublin, Province Specialist Hospital of Cardinal Stefan Wyszynski in Lublin and the Regional Specialist Hospital in Radom.

The respondents were aged from 25-72 years; the secondary was 48.71±9.35 years. The level of education of women was diverse: 32 (31,37%) had vocational education, 27 (26.47%) higher, 29 (28.43%) secondary and 14 (13.73%), elementary. More than a half of respondents (n=58; 56.86%) were city residents and the remainder 44 (43.14%) lived in rural areas. The majority of respondents were married (n=76; 74.51%), other 10 (9.80%) being unmarried and the remaining 16 (15.69%) were single. The financial situation of the 49 (48.04%) of women was rated as ordinary, other 42 (41.18%) as good, 6 (5.88%) as very good and the remaining 5 (4.90%) as bad.

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TABLE 1. The evaluation of psychic accommodation to cancer with regard to the duration of the illness.

Strategies of dealing with the illness	The duration of the illness									Statistical analysis
	up to 6 months			6 months – 2 years			over 2 years			
	M	Me	SD	M	Me	SD	M	Me	SD	
PwA*	18.31	19.0	3.58	16.46	16.00	4.68	18.06	18.50	4.84	H=4.93; p=0.09
FS**	22.11	22.0	2.61	21.40	21.00	3.02	20.50	21.00	3.35	H=2.86; p=0.24
HH***	12.58	12.0	2.67	13.70	13.00	3.99	17.31	17.50	4.99	H=11.40; p=0.003*
PR****	22.00	22.0	2.26	21.18	21.00	2.34	21.06	21.50	3.17	H=2.88; p=0.24

*preoccupation with anxiety (PwA), **fighting spirit (FS), ***helplessness – hopelessness (HH) and a positive revaluation (PR).

To assess coping strategies with disease, denoting adaptation to cancer, a Mini-Mac standardized scale of the Mental Adjustment to Cancer Diseases and a self-constructed questionnaire were used. Mini-Mac scale was used for evaluating four 'coping with disease' strategies. It is helpful to know how people react to the diagnosis of cancer, as well as mental changes that may ensue during treatment and rehabilitation. It consists of 29 statements describing the following strategies: preoccupation with anxiety (PwA), fighting spirit (FS), helplessness – hopelessness (HH) and a positive revaluation (PR). Range of scores for each of the above four strategies fits within 7-28 points. A higher score indicates the severity of behavior that characterizes a way of coping with the situation of cancer [4].

In the questionnaire of the authors' own construction data concerning the sociodemographic situation was collected, investigated and the course of treatment of cancer of the reproductive organs (including the type of treatment, duration of the disease, symptoms and complications) was analyzed.

Statistical analysis was performed using Chi² test, Mann-Whitney U test, W. Shapiro-Wilk, Kruscal-Wallis tests. Database and statistical surveys were carried out on the basis of STATISTICA 10.0 computer software (StatSoft, Poland).

RESULTS

Most women were treated for either cervical (n=46; 45.10%) or endometrial (n=35; 34.31%) cancer and less frequently the ovarian cancer (n=18; 17.65%) and a very rare vulvar (n=2; 1.96%) or vaginal cancers (n=1; 0.98%).The duration of the disease varied: in 50 (49.02%) of the respondents it ranged between 6 months and 2 years, in others 36 (35.29%) to 6 months and in the remaining 16 (15.69%) over two years. In case of more than a half of the respondents (n=58; 56.86%), there were no complications during the treatment of cancer and in 44 (43.12%) complications appeared. Respondents were asked how to evaluate the improvement of their health. More than a half (n=56; 54.90%) considered it insignificant, other 24 (23.53%) as a significant, and the remaining 22 (21.57%) claimed there was no improvement at all. Most of the women (n=48; 47.06%) tolerated the hospital stay pretty well, 37 (36.37%) wrote that it was not as bad as they had initially thought and for 17 (16.67%) it was a traumatic experience. The satisfaction with the treatment in more than a half of the women (n=56; 54.90%) was identified as medium, in 36 (35.30%) as small and in the remaining 10 (9.80%) as large.

Research shows that most respondents coped with the disease using the following strategies: the fighting spirit (M=21.51; Me=22.00, SD=2.96), and positive reevaluation (M=21.45; Me=21 00: SD=2.46), but to a lesser degree they applied preoccupation with anxiety (M=17.36; Me=18.00; SD=4.40) and helplessness – hopelessness strategy (M=13.87; Me=13.00; SD=4.04). The analysis found that the reliability of the scale Mini-MAC was high. The compatibility factor of internal and one of Cronbach's was 0.70.

The study shows that women increasingly applied constructive strategies (fighting spirit and positive revaluing) (M=42.96; Me=43.00; SD=4.65) in dealing with the disease rather than destructive ones (drug absorption, helplessness – hopelessness strategy) (M=31.24; Me=31.00; SD=7.54).

The analysis of the collected material shows that respondents whose disease lasted more than two years significantly more often (p=0.003) applied in the fight against disease the strategy of helplessness – hopelessness rather than those women suffering for half a year or 6 months to 2 years. There were no significant differences between the groups in evaluating other strategies of coping with the disease (p>0.05) (Table 1).

Statistical analysis showed that women who had not experienced complications during treatment significantly revealed more fighting spirit than those who experienced complications (p=0.05). There were no significant differences between the groups regarding their evaluation of other strategies to cope with the disease (Table 2).

A statistical analysis revealed that respondents who did not observe their health improve significantly more than others, were guided in the fight against the disease with preoccupation with anxiety strategy (p=0.002), and helplessness – hopelessness (p=0.01). In case of other strategies, no significant differences were found (Table 3).

A statistical analysis has shown that women who were only slightly satisfied with treatment defined in a significantly greater extent in the fight against disease were guided by the preoccupation with anxiety (p=0.0002), and helplessness – hopelessness, (p=0.0009) rather than those who described it as a medium or large. It was also found that respondents whose satisfaction was high had a significantly greater sense

TABLE 2. Rating mental adaptation to cancer including the complications during treatment.

Strategies of dealing with the illness	The incidence of complications in illness's course						Statistical analysis	
	yes			no				
	M	Me	SD	M	Me	SD	Z	P
PwA*	18.07	18.00	3.22	16.83	16.50	5.08	-1.28	0.20
FS**	20.86	21.00	3.17	22.00	22.00	2.71	1.99	0.05*
HH***	14.00	13.00	3.63	13.78	12.00	4.36	-0.77	0.44
PR****	21.07	21.00	2.69	21.74	22.00	2.26	1.40	0.16

*preoccupation with anxiety (PwA), **fighting spirit (FS), ***helplessness – hopelessness (HH) and a positive revaluation (PR).

of fighting spirit than women with medium or low satisfaction (p=0.01). There were no significant differences between the groups regarding the evaluation of strategy of positive revaluation (Table 4).

Using the collected research material one may see that respondents who felt that the stay in the hospital for them was a traumatic experience in a significantly greater (p=0.008) than the others, coped with illness selecting preoccupation with anxiety. There were no significant differences between the groups in the evaluation of other strategies to cope with the disease (Table 5).

DISCUSSION

The experience of cancer is a particularly painful experience for any human. The literature provides as an important element in the process of diagnosis and treatment the examples of different forms of mental adaptation to the situation. Each person reacts in a different way to the diagnosis of cancer. This is dependent on previously educated defense mechanisms in crisis situations and individual personality traits. The process of adapting to difficult situations is expressed through restoring mental balance by seeking rational solutions either by mitigating the intensity of emotional reactions. Active, constructive ways to deal with the situation of serious health issues plays a crucial role in the acceptance of the situation [5-8]. Coping strategies in cancer cited in the literature are "fighting spirit", "positive revaluation", "preoccupation with anxiety," "helplessness – hopelessness." These strategies combine the two, more general: constructive (fighting spirit, positive revaluation) and destructive (preoccupation with anxiety, helplessness – hopelessness). [9,10]. Fighting spirit (FS) expresses the mobilization of women to "confront" the disease as a challenge and taking measures that aim to combat it. This attitude consists of the behavior of both the escape and confrontational type. In the literature there are reports saying that people taking the attitude of fighting spirit have a higher survival rate as well as the absence of disease with the passage of 5-10 years after the diagnosis of cancer [3,11].

The second constructive strategy used by the sick is a positive reevaluation (PR), which is expressed through a reordering of the problem, so that with full awareness of the seriousness of the difficulties one is able to find hope and satisfaction of the experienced years. This attitude shows bringing forward a special way of life and the acceptance and recognition of the disease as their fate [9,10]. Our study showed that women coping with the disease most often chose the strategy of fighting spirit (21.51±2.96) and a positive revaluation (21.45±2.46), and to a lesser extent, used the preoccupation with anxiety (PwA) (17.36±4.40), and helplessness – hopelessness (13.97±4.04). In the situation of women treated for cancer it is so important that the strategy of preoccupation with anxiety due to illness, which is perceived as a threat the control over which is impossible. This results in interpreting any changes as signs of deteriorating health. Also, it affects the severity of symptoms such as pain, fatigue, eating disorders, depression,

TABLE 3. Rating mental adaptation to cancer including evaluation of health improvement during treatment.

Strategies of dealing with the illness	Health improvement in the process of treatment									Statistical analysis
	Absence			Slight			Significant			
	M	Me	SD	M	Me	SD	M	Me	SD	
PwA*	19.68	20.00	4.50	17.38	18.00	3.87	15.21	16.00	4.55	H=12.26; p=0.002
FS**	20.55	20.50	3.66	21.61	22.00	2.69	22.17	22.00	2.75	H=2.46; p=0.29
HH***	16.23	16.00	4.70	13.34	12.00	3.65	12.96	12.00	3.59	H=8.84; p=0.01
PR****	21.09	22.00	2.81	21.66	21.00	2.44	21.29	21.00	2.22	H=0.37; p=0.83

*preoccupation with anxiety (PwA), **fighting spirit (FS), ***helplessness – hopelessness (HH) and a positive revaluation (PR).

TABLE 4. Rating of mental adaptation to cancer including the assessment of treatment satisfaction.

Strategies of dealing with the illness	Satisfaction with the treatment									Statistical analysis
	small			medium			great			
	M	Me	SD	M	Me	SD	M	Me	SD	
PwA*	19.36	19.00	3.80	16.95	17.50	4.01	12.50	12.00	4.40	H=17.33; p=00002
FS**	20.33	21.00	3.20	21.96	22.00	2.60	23.20	23.50	2.66	H=9.30; p=0.01
HH***	15.36	13.50	4.45	13.55	13.00	3.47	10.30	10.00	2.98	H=14.00; p=0.0009
PR****	21.42	22.00	3.04	21.32	21.00	2.13	22.30	23.00	1.89	H=1.68; p=0.43

*preoccupation with anxiety (PwA), **fighting spirit (FS), ***helplessness – hopelessness (HH) and a positive revaluation (PR).

TABLE 5. Assessment of mental adaptation to cancer including an evaluation of hospital stay.

Strategies of dealing with the illness	The evaluation of hospital stay									Statistical analysis
	Traumatic experience			It was not as bad as I had expected it			It was good			
	M	Me	SD	M	Me	SD	M	Me	SD	
PwA*	19.71	20.00	3.14	17.84	17.00	4.09	16.17	16.50	4.66	H=9.75; p=0.008
FS**	20.65	21.00	2.29	21.11	22.00	3.29	22.13	23.00	2.82	H=5.12; p=0.08
HH***	15.24	14.00	4.10	13.81	13.00	3.97	13.44	12.50	4.06	H=2.60; p=0.27
PR****	21.29	22.00	1.86	20.89	21.00	2.74	21.94	22.00	2.37	H=3.99; p=0.14

*preoccupation with anxiety (PwA), **fighting spirit (FS), ***helplessness – hopelessness (HH) and a positive revaluation (PR).

which often results in deterioration of prognosis. [8,9,11]. A positive must therefore be the fact that constructive strategies were often chosen by women rather than those destructive ones, which is consistent with the results of other researchers. [11]. It is also important that the more intense are positive strategies overevaluation and fighting spirit, the lower the use of preoccupation with anxiety and helplessness – hopelessness. The relationship can be considered as a very satisfactory result, because the patient during treatment triggers defense mechanisms to reduce negative emotions, distracting from the difficult situation – the problem and discovering the value of life anew [12-14]. During recent years, the above-mentioned data do not show any significant differences, the results are similar and are not expected to change.

In this study, the authors decided to check the factors that could be related to using specific strategies to deal with the cancer of reproductive organs. The result was somewhat surprising, as it was expected that the preference of the strategy will depend on many factors. It should be noted that the presented work is part of a larger study. One factor that was important was the duration of disease. It turned out that women who had to combat their disease more than two years often chose the strategy of helplessness – hopelessness, than those suffering less. It is very worrying that this strategy provides a sense of loss, helplessness and passive submission to the situation of the disease. The patient is no longer struggling with cancer [9,10,14].

Another important predictor and the expected choice of strategy proved to be the occurrence of complications of cancer treatment, which is no cause more frequent use of fighting spirit. Used forms of coping with the disease have a significant impact on the course of treatment. Our study has shown that small improvements in health status occurs in women taking the strategy of absorbing anxiety. These patients do not tolerate stay on the ward, described as a traumatic experience.

The attitude of helplessness – hopelessness characterized in the evaluation of women's lack of improvement in health as well as their commitment to the treatment turning out to be low. These results showed how destructive policies negatively affect the general course of treatment. In contrast, a strategy of fighting spirit makes the sick satisfied with the treatment and its effects, and they see a significant improvement in their health and also largely use their own strength to engage in treatment. In our study, the relationship between the strategy of a positive revaluation of a course of treatment was not detected. Reports of Malicka et al. [8] testify to the fact that the style of destructive coping with the disease on a relationship with lowered mood of women can lead to depression. In contrast, constructive style correlates with the lack of depressed mood. The following example shows how to change the mental attitude approach to the disease, and thus the effects of treatment. Literature says that the strategies of adaptation to the disease and its acceptance play a key role in the process of treatment and recovery [1,2,9,12]. In health care for patients with cancer, healthcare professionals should therefore remember this important relationship.

CONCLUSIONS

1. Most women fighting cancer used constructive strategies of the remaining part – the destructive ones. Choosing the type is determined by such factors as the duration of the disease, the incidence of complications during treatment, subjective evaluation of how to improve the health status and satisfaction with treatment and hospital stay duration.
2. Strategies of mental adaptation significantly affect the course of treatment. The use of absorbing anxiety causes significantly more women not to feel the improvement of health and hospitalization for them is a traumatic experience. In contrast, a form of helplessness – hopelessness is associated with low satisfaction with treatment, and lack of improvement in subjective health. People who use fighting spirit significantly more satisfied with the results of treatment.

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