

Self-fulfilment of women after radical mastectomy

(Umiejętności samorealizacji kobiet po radykalnej mastektomii)

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Abstract – The purpose of the research: the estimation of the sense of self-efficiency after a radical treatment of a breast cancer.

The material under investigation and methods: The research was conducted on a group of 82 women who have undergone a radical treatment of a breast cancer, their ages varying from 31 to 63. The control group comprised of the nursing faculty students. It was a group of 39 people, aged from 27 to 49. Both groups were tested using the General Self-Efficacy Scale. The relations were found between the results of the research and the selected socio-demographic features of women treated radically for a breast cancer like age, education and the period of time between the end of the radical treatment and the current research.

The results and conclusions: It was stated that the average result of the GSES test for the whole group of women who have undergone a radical treatment for a breast cancer was significantly lower than in the control group. It was indicated that, starting from 45 years of age, the women who were treated for a breast cancer statistically have a significantly dropping level of the sense of self-efficiency. The lowest level, in comparison with the other decades of a lifetime, is between 56 and 65 years of age, which is statistically relevant. Moreover, it was stated that, with the passing of time, after the end of the radical breast cancer treatment the sense of self-efficiency and the meaning of life were increasing and after a year there was a statistically significant increase of the sense of self-efficiency, plus its level remained stable after that.

Key words - women who have undergone a radical treatment of a breast cancer, the sense of self efficiency, test General Self-Efficacy Scale, the significance of the selected socio-demographic features.

Streszczenie – Cel badań: ocena poczucia własnej skuteczności po radykalnym leczeniu raka piersi.

Material i metody: Badaniami objęto 82 kobiety w wieku 31 – 63 lata leczonych radykalnie z powodu raka piersi. Grupę kontrolną stanowiły studentki kierunku pielęgniarstwa. Grupa ta liczyła 39 osób w wieku 27 – 49 lat. Obie grupy poddano badaniom z wykorzystaniem Skali Uogólnionej Własnej Skuteczności. Wyniki badań odniesiono do wybranych cech socjo -demograficznych kobiet leczonych radykalnie z powodu raka piersi takich jak wiek, wykształcenie, czas jaki

upłynął od zakończenia radykalnego leczenia choroby nowotworowej do momentu badań.

Wyniki i wnioski: Stwierdzono, że średnia wartość testu GSES dla całej badanej grupy kobiet poddanych radykalnemu leczeniu z powodu raka piersi była znamienne statystycznie niższa niż grupie kontrolnej. Wykazano, że począwszy od 45 rż. u kobiet leczonych radykalnie z powodu raka piersi znamienne statystycznie obniża się poziom poczucia własnej skuteczności. Najniższy i to istotnie statystycznie w porównaniu do pozostałych dekad życia, jest w przedziale wieku 56 – 65 lat. Ponadto stwierdzono, że w miarę upływu czasu po zakończeniu leczenia radykalnego raka piersi poczucie sensu życia oraz własnej skuteczności u badanych kobiet wrosło, a znamieny statystycznie wzrost poczucia własnej skuteczności nastąpił po upływie roku od zakończenia leczenia i utrzymywał się już na porównywalnym poziomie.

Słowa kluczowe - kobiety po radykalnym leczeniu raka piersi, poczucie własnej skuteczności, Skala Uogólniona Własnej Skuteczności, znaczenie wybranych cech socjo - demograficznych.

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Authors' contributions to the article:

- A. The idea and the planning of the study
- B. Gathering and listing data
- C. The data analysis and interpretation
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- E. Critical review of the article
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I. INTRODUCTION

There are no limitations to self-fulfilment. It can apply to the world of objects and refer to the creation of a new quality.

It can also refer to inner mental life. In any case, self-fulfilment has the air of subjective satisfaction with the action completed about it, as it is connected with the process of one’s deepest desires being fulfilled and one’s nature being realized. In general terms, self-fulfilment is a process of updating one’s potential abilities and one’s reaching the state of happiness in that process. However, there are multiple obstacles on the way to self-realization. They may be of different nature, e.g. intolerance of dissimilarity, control and distrust in social life, blocking and selecting information, denying one’s past, the lack of perspectives and so on [1,2]. Many of those barriers are activated because of illness or disability [3,4]. In such situations it is easy to feel miserable and find it hard to cope with the suffering. Radical treatment, which offers a chance of full recovery, may reinstate the hopes of regaining one’s health and motivation to do so. Being in good health implies returning to one’s need of development and realization of one’s desires – one’s craving for self-fulfilment returns. One of the paths to self-realization is the ability to handle difficult situations and surmounting obstacles [5,6]. As this phenomenon is as important as scarcely analysed in medical studies, the authors of this paper have been encouraged to do research on the self-efficacy of women who have undergone a radical treatment for breast cancer with reference to selected sociodemographic features.

II. MATERIALS AND METHODS

Materials

The research was conducted in the group of 82 women, their ages varying from 31 to 63, who had undergone radical treatment for cancer (the studied group). The control group was formed by the students of the bridging nursing course (1st year) at Collegium Masoviense. There were 39 people in this group and their age range was 27 – 49.

Methods

B. Schwarzer and M. Jerusalem’s General Self-Efficacy Scale (GSES) was employed in the research. The questionnaire consisted of 10 statements constituting one factor. Its function is to measure strong one’s assessment of one’s self-efficacy in handling difficult situations and obstacles is. The range of available scores is 10 to 40; the higher the score, the better

one’s assessment of self-efficacy. The results were compared with the selected sociodemographic features of the women treated radically for breast cancer such as age, education or time that passed after their treatment was finished until this study was conducted (tables 1, 2, 3).

Statistical analysis

The data collected during the research have been processed with regard to such descriptive statistical methods as arithmetic mean and standard deviation. All the statistical calculations were made in the Statistica 6.0 analysis system. The statistical significance of the differences between the two groups was calculated on the significance levels of $p < 0,05$; $p < 0,01$; $p < 0,001$ using Student’s t-test and Wilcoxon signed-rank test.

III. RESULTS

The mean value of the GSES in the studied group was 22,63 (SD± 5,61), while in the control group it was 29,87 (SD±4,99). The difference in the self-efficacy assessment between the two groups was statistically significant ($p < 0,001$). The self-efficacy levels in relation to the selected demographic features of the studied women, such as age, education or the time that passed since the cancer treatment had been finished are shown in tables 1, 2, 3, 4, 5.

Table 1. The results of the GSES test with regard to the age of the women

Age	Percentage of the interviewed (%)	The results of the GSES test (mean ± SD)
Up to 35	21/25,6	25,6±3,9 ¹
36 – 45	26/31,7	31,7±4,11 ²
46 – 55	20/24,4	24,4±5,12 ³
56 – 65	15/18,3	18,3±5,42 ⁴

#1# do #2# $p < 0,001$; #2# do #3# $p < 0,001$; #2# do #4# $p < 0,001$; #1# do #4# $p < 0,001$

The results shown in table 1 indicate that radically treated women, starting with age 45 on, assess their self-efficacy lower and lower in a statistically significant manner. The lowest level (with statistical significance as compared to other age ranges) was recorded for the group of 56 to 65 years old.

Table 3. The results of the GSES test with regard to the education of the women under research

education	Percentage of the interviewed (%)	The results of the GSES test (mean ± SD)
primary	6/7,3	16,7±2,12 ¹
vocational	9/11,0	18,2±4,87 ²
secondary general	13/15,9	20,6±5,2 ³
Matura – high school exam passed	15/18,3	24,9±4,16 ⁴
bachelor	17/20,7	26,5±4,37 ⁵
MA/MSc diploma	22/26,8	28,9±3,87 ⁵

#1# do #4# : p <0,001; #1# do #5# : p <0,001; #1# do #6# : p <0,001;
 #2# do #4# : p <0,01; #2# do #5# : p <0,001; #2# do #6# : p <0,001;
 #3# do #4# : p <0,05; #3# do #5# : p <0,01; #3# do #6# : p <0,001;
 #4# do #6# : p <0,001;
 #5# do #6# : p <0,05;

The data in table 2 show that the education of women who underwent radical breast cancer treatment did affect their assessment of self-efficacy. The purpose-in-life and self-efficacy levels increased in a statistically significant way along with the level of education of a woman.

Table. The results of the GSES test with regard to how much time passed after the radical treatment had finished until the relevant GSES test

time that passed after the treatment was finished	Percentage of the interviewed (%)	The results of the GSES test (mean ± SD)
Up to 6 months	19	17,4±4,21 ¹
0,5 – 1 year	20	18,3±3,89 ²
2 – 5 years	18	26,8±4,62 ³
Over 5 years	25	28,1±2,9 ⁴

#1# do #3# : p <0,001; #1# do #4# : p <0,001;
 #2# do #3# : p <0,001; #2# do #4# : p <0,001;

The results presented in table 4 indicate that as time after the breast cancer treatment was finished passed, the purpose-in-life and self-efficacy levels were on the increase. The statistically significant raise in the level of self-efficacy could be observed after a year after a woman finished her treatment. That level was found to be stable later on.

IV. DISCUSSION

The sense of self-efficacy has become an important element of Albert Bandura’s social learning theory. According to it, for the change in one’s behaviour to occur, a specific set of beliefs is necessary. Those beliefs pertain to the value of the prospective change for the individual, the ability to achieve the goal and the level of self-efficacy, which is defined by the author as a subjective expectation of a person that he or she would manage to behave in a certain way in a certain situation. In this understanding, the sense of self-efficacy is, as Bandura states, a basic intrapsychic factor lying at the foundations of human activity. It is expressed by one’s level of conviction whether or not he or she is capable of achieving the set goal, i.e. perform a given activity successfully [7,8,9]. At the same time, Schwarzer [6] discussed the sense of self-efficacy in the following manner: “the self-efficacy level may lower or increase

one's motivation to do something. People with strong sense of self-efficacy engage in more ambitious tasks. Their goals are harder to achieve, and yet they are determined to reach them (...). Once they are involved, they are ready to make more effort as well as more persistent than those whose level of self-efficacy is low. Should any impediments emerge, the former are back on their feet in no time and are still determined to reach their aims. Good sense of self-efficacy also allows people to choose what they perceive as challenging circumstances, explore their surroundings or lead to the creation of new situations (...). Sense of self-efficacy, however, is not synonymous with positive delusions or unrealistic optimism as it is based on experience and does not lead to insensible risk-taking. What it does lead to is bold behaviour on the verge of one's abilities" (p. 79). Many studies have shown that self-efficacy level is directly connected to engaging in and continuing health-seeking behaviour [6]. The authors of this paper fully agree with that view, which constituted a factor that motivated the effort made to complete this study. Characteristically enough, the mean value of GSES for the whole studied group of women who have undergone radical breast cancer treatment was significantly lower than that of the women in the control group. The intensity of that difference is surprisingly apparent and it can partly be related to the character of the control group consisting of college students. As one may expect, students of a higher education institution must have succeeded in a difficult recruitment process. The fact that such a success influenced their self-efficacy seems natural. What could also be of significance is the fact that these people have clear plans and goals for the not too distant future (such as graduation, for that matter), which makes their lives more purposeful.

The results obtained in this study indicate that women who have undergone radical breast cancer treatment, starting from those 45 years old and older, experience a significant decrease in the self-efficacy level. The lowest values in comparison with other ages were obtained for the age group of 56 to 65; the difference was statistically significant. That may be related to the fact that many women representing that age group participated in the study only a short period after their radical cancer treatment was over.

Interestingly enough, the time that passed after the end of the treatment was a crucial factor contributing to the change in the self-efficacy level. In general terms, it was observed that as time passed after the radical breast cancer treatment was over the levels of purpose-in-life and self-efficacy of the studied women increased. The statistically significant increase in the sense of self-efficacy could be observed a year after the treatment and the level remained on more or less the same level after that. As this topic has not been widely undertaken, the authors are unable to make reference to the results of other

studies [10,11]. The authors are aware that the tendencies investigated here should be studied in larger patient groups. Therefore, this research should be treated as merely a modest contribution to the discussion on women treated for cancer.

V. CONCLUSIONS

1. The mean value of the GSES in the studied group of women who have undergone radical mastectomy was significantly lower than in the control group.
2. The self-efficacy level of the radically treated women is decreasing with statistical significance from the age of 45 on. The significantly lowest levels of GSES were obtained in the group of women aged between 56 to 65.
3. As the time after the breast cancer treatment was finished passed, the purpose-in-life and self-efficacy levels of the studied women rose. The statistically significant increase in self-efficacy assessment was recorded a year after treatment and the level was observed to be stable from that time on.

VI. REFERENCES

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