

## SUBJECTIVE CONTROL LEVEL IN FEMALE BREAST CANCER PATIENTS HAVING PERSONAL HELPLESSNESS

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**Abstract:** Oncological diseases are ones posing a threat to the human life and health. This work presents the results of studying the subjective control level with a sample of female breast cancer patients featuring personal helplessness and independence. As a result of the analysis conducted, it has been found that patients characterized by independence have the internal locus of control while ones with personal helplessness tend to believe what occurs to them is a result of bad luck, set of circumstances, or a negative impact of other people. The obtained data allow expanding the opportunities of focused prevention of the disease progression and will serve as a basis for developing programs of psychological support for cancer patients.

**Keywords:** subjective control level, locus of control, personal helplessness, independence, breast cancer.

### 1 Introduction

The issue of survival and efficiency of treatment in oncological diseases is a relevant and socially important problem for the modern science to solve. Nowadays, medicine is oriented to increasing survival of patients having malignant neoplasms, extending the duration of their life, and maintaining the quality of life for this category of patients. Support of cancer patients is a priority focus area in medical and psychological studies within which detection of prerequisites for the disease, survival factors, and psychological resources of adaptation to the disease becomes especially important.

There are two principal viewpoints on the nature of oncological diseases. According to the first one, there is no psychological determination in the formation and development of a malignant neoplasm, as well as in survival of patients. Supporters of this approach say the principal causes of the origin and development of tumors (carcinogenesis) are the impact of exogenic and endogenic factors on people and their interaction (Zaridze, 2009; Belitskiy, 2006; Meneghetti, 2005). Among the exogenic group of factors, they list ones of the environment and the way of life: smoking, nutrition particularities, infectious agents, professional carcinogens, ionizing radiation, ultraviolet radiation, consumption of alcoholic beverages, atmospheric air pollution, reproductive factors, and low physical activity. The group of endogenic factors is composed by the genetic, hormonal, and immunological ones (Zaridze, 2009; Belitskiy, 2006).

The second point of view on the nature of malignant neoplasms considers them to be a psychosomatic pathology (Meneghetti, 2005; Brown et al., 2003; Fox, 1995). In the course of empirical check, researchers prove the existence of relationship between oncological diseases and anxiety, signs of depression, stress, emotional overstrain and the ability to verbalize one's own emotions, the type of responding to illness, particularities of one's relationships with people around one, and so on. Moreover, within this approach, they note the dependence of survival of patients having malignant neoplasms on their mental and emotional state, psychological and personal characteristics, and particularities of social relationships.

Within this research, the authors are going to consider personal particularities in the context of studying the prerequisites and factors of oncological diseases. The theoretical and methodological approach to studying the personal particularities was the concept of personal helplessness.

So, the objective of the research is studying the subjective control level in female breast cancer patients having different personal characteristics: personal helplessness and independence.

### 2 Literature Review

Within the concept of personal helplessness, two personal level entities are singled out that are opposite in their psychological content – personal helplessness and independence. Being two poles of one continuum, personal helplessness and independence are viewed in the role of a factor determining the level of subjectness. So, one's staying at one continuum point or another determines the level of one's subjectness, i.e., one's initiative, ability to transform the reality and to control one's actions. Personal helplessness manifests itself in a subject's behavior as passivity, insufficient assertiveness, in relationships with others – as difficulties and dissatisfaction with these relationships, and in activity – as its lower successfulness. Thus, within the subject- and activity-based approach, personal helplessness is defined as "the quality of a subject representing a unity of certain personal particularities emerging as a result of interaction of the internal conditions with the external ones and determining the low level of subjectness, i.e., one's low ability to transform the reality, to control events of one's own life, to set and achieve goals overcoming various difficulties" (Tsiring, 2010).

Discussing the question about the structure of personal helplessness, it has to be noted that by structure, it is not only the total of structural components, but also the nature of relationships between them that is understood. The structure of personal helplessness is represented by four components: motivational, cognitive, emotional, and volitional ones having significant relationships that are different at different stages of ontogenesis. According to the empirical studies conducted (Tsiring, 2010), the motivational component in helpless tested ones is characterized by insufficiently developed motives on which the successfulness of their activity and further social and professional fulfillment depend. In subjects having the personal helplessness trait, the motivational sphere is characterized by the external locus of control, failure avoidance motivation, and a low aspirations level. Particularities of the cognitive constituent of personal helplessness are determined by a low divergent thinking indicator, rigidity of thinking, as well as the pessimistic attributional style. The emotional component of personal helplessness is characterized by higher anxiety, the low control of emotions and behavior, impetuosity, dependence on moods, excessive emotional instability, and frustration. The volitional sphere of subjects featuring personal helplessness characterizes the psychological content of the volitional component of personal helplessness with the following particularities: indecisiveness, decreased indicators of assertiveness and initiative, low discipline, insufficient self-possession and focus. Thus, personal helplessness represents a mental configuration, and the description of its structural components offers a more complete idea about the psychological content of the phenomenon of personal helplessness.

Studies conducted within the concept of personal helplessness allow singling out diagnosing indicators of personal helplessness (Tsiring, 2010; Tsiring & Evstafeeva, 2011). The pessimistic attributional style, excessive anxiety, depressive frame of mind, and low self-esteem serve as such diagnosing manifestations. Representing an individual's integral systemic characteristic, personal helplessness cannot be reduced to the total of the said indicators, but it is distinguished by the qualitative originality. Independence, as a subject's quality conditioning his or her

initiative, is diagnosed with the opposite indicators present: the optimistic attributional style, a high enough self-esteem, and low levels of depression and anxiety.

The subjective control level (or locus of control) is a generalized characteristic of personality. This concept was suggested by J. Rotter (1954). Locus of control is characterized as a personal property consisting in one's ascribing the internal (internality) or external causes (externality) to one's own success or failures. That is, the concept is used for denoting the extent of one's being sure that results of events taking place in one's life are controlled by one independently (the internal locus of control) or that one's life is driven by the external forces beyond one's powers (the external locus of control).

Locus of control that is characteristic for a person is universal toward various situations the person has to face. One and the same localization of control can characterize the person's behavior in cases of both failure and success. Likewise, it should be noted this can be relevant to various areas of the subject's life. Thus, there are two extreme control localization types: the internal and the external ones. People having a low general level of subjective control (the externals) think the occurring events depend on the action of some external forces: luck, chance, other people, etc. Those having a high level of subjective control (the internals) believe the cause of their life events is their own competence, focus, assertiveness, and so on (Rotter, 1954).

Speaking about the studies of the subjective control level in patients having oncological diseases, ambiguity and controversy of conclusions obtained by various researchers (Wilson et al., 2018; Wallston, K. A., & Wallston, B. S., 1978; Kulpa et al., 2016) should be noted. So, as a result of studying the relationship of locus of control and the state of health, B. Strickland (1989) concludes that behavior of people having the internal locus of control largely contributes to keeping up their health. She indicates that internals are interested in information about health more frequently and they strive to control their own state of health. In the work of M. G. Ivashkina (2010), it is noted that most cancer patients are characterized by the external locus of control prevailing in all spheres, especially in relation to health, family, and communication. Iskandarsyah et al. (2014) found that in female breast cancer patients, the level of external control is higher, and the internal control indicators are lower as compared to healthy women. A number of works point out that the internal locus of control plays a positive part in the course of oncological diseases, and it is also a prerequisite for high rates of hope for convalescence (Zabelina, 2019; Tsiring & Evstafeeva, 2020).

Studying locus of control in female breast cancer patients having different personal particularities will allow defining the factors of survival and disease course in malignant tumor patients more precisely.

### 3 Research Methodological Framework

The objective of the research is studying the subjective control level in female breast cancer patients having different personal characteristics: personal helplessness and independence. This research objective has conditioned setting a number of research tasks as follows: diagnosing personal helplessness/independence in the female breast cancer patients and based on this, forming two samples for the study (the female breast cancer patients who are characterized by personal helplessness and the ones characterized by independence); empirically confirming distinctions in the subjective control level in the female breast cancer patients featuring personal helplessness and independence.

The research involved 190 women aged 26 to 80 (at the average age of 55 years old) having hormone-dependent malignant tumors of various stages originating from the mammary tissue epithelium (breast cancer) in the moderately differentiated tumor variant. The said patients reside within the city of Chelyabinsk and Chelyabinsk region. They have been under the oncologist's care since the point of diagnosing for up to 6 months and

undergoing inpatient treatment at the State budget-funded healthcare institution "Chelyabinsk regional clinical center for oncology and nuclear medicine". Based on diagnosing personal helplessness, two groups were formed of all the tested ones: the female patients featuring personal helplessness (N=57) and the ones featuring independence (N=30). The female patients having intermediate scores in the "personal helplessness – independence" scale were not studied at this stage.

The following techniques were used as the research methods: the subjective control test questionnaire (J. Rotter's scale as adapted by E. F. Bazhin, S. A. Golyunkina, and A. M. Etkind (1984)) measuring individual particularities of the subjective control over various life situations; questionnaire of personal helplessness diagnosing the presence of systemic characteristics (personal helplessness/independence) (Tsiring, 2010).

As the mathematical statistics methods, descriptive statistics and Mann-Whitney U-test were used.

### 4 Results and Discussion

For studying the subjective control level, two groups of the tested ones were formed, featuring personal helplessness and independence. The samples were formed on the basis of the results of identifying personal helplessness in adolescents: the tested ones who scored low on the scales of the personal helplessness diagnosing technique (Tsiring, 2010) were placed into the "independent" group, while the respondents who had high scores – into the "helpless" group. The size of sampling at this stage of the research amounted to 190 female breast cancer patients, including those featuring independence – 30 tested ones, the women having the personal helplessness trait – 57 tested ones, and 103 women who had intermediate scores. The following stage of the research which consisted in studying the subjective control level involved the tested ones who had personal helplessness and independence traits.

As a result of the conducted comparative analysis of the subjective control level, significant distinctions have been found in the personal helplessness and independence groups of patients in the following indicators: overall internality, internality of achievements, internality of failures, internality in family relationships, internality in industrial relationships, internality toward health and illness (Table 1).

Table 1 Results of comparative analysis of the subjective control level in the female breast cancer patients having personal helplessness and independence

Indicator of the subjective control level	Average rank		U	p
	Patients having personal helplessness	Patients having independence		
Overall internality	33,01	64,12	228,5	<b>0,000</b>
Internality of achievements	36,70	57,87	439,0	<b>0,000</b>
Internality of failures	39,08	52,19	574,5	<b>0,021</b>
Internality in family relationships	37,89	55,62	506,5	<b>0,002</b>
Internality in industrial relationships	36,00	58,24	399,0	<b>0,000</b>
Internality in interpersonal relationships	41,04	49,63	686,0	0,130
Internality toward health and illness	40,75	50,17	670,0	<b>0,09</b>

Source: authors

Proceeding from the data obtained, the authors can note that the breast cancer women characterized by independence score on the overall internality scale higher than the personal helplessness patients (p=0,000). Their high level of overall internality corresponds to the high level of subjective control over any significant situations. So, the female patients with the independence trait believe that the greater part of significant events in their life is a result of their own actions. They are also

convinced they can rule their life on their own and they recognize their responsibility for it. Low figures of overall internality found in the patients featuring personal helplessness correspond to the low subjective control level. The tested ones characterized by personal helplessness do not note the association between their actions and life events which are significant for them. They do not believe they are able to control their development, either, and they think the greater part of events taking place is a result of chance, luck or bad luck, or other people's actions.

It should be noted that significant distinctions between the personal helplessness group and the independence group of the tested ones have been obtained in all scales of the subjective control level, except the Internality in interpersonal relationships indicator. In the sphere of interpersonal relationships, localization of control implies confidence in one's ability to control one's relationships with others (the internal locus of control) and of one's inability to influence building the relationships with people around one (the external locus of control). So, proceeding from the obtained data, no distinctions have been found between the female patients having personal helplessness and independence concerning locus of control in interpersonal relationships.

The independent female patients are distinguished by internality in the areas of achievements, failures, family and industrial relationships, as well as health and illness, unlike those having personal helplessness. The latter are characterized by externality in the listed indicators of the subjective control level. People having a high level of internality of achievements think it is owing to their own efforts that they have achieved success in their life. The female patients diagnosed with independence believe that they have achieved success in their life owing to their persistence, focus, having and developing abilities that are essential for achieving the set goals. Meanwhile, the women distinguished by personal helplessness tend to see the reason behind their own achievements and success outside: luck, good fortune, assistance of others, and so on.

As for failures, people having the pronounced internality tend to undertake responsibility for an event or a problem having occurred and for its subsequent solution. Meanwhile, subjects with the external locus of control tend to blame other people, external circumstances, or bad luck for failure situations. So, localization of control in failure situations implies a person's being sure he or she bears responsibility for any troubles happening, taking into account his or her competence level, focus in achieving the result, analyzing his or her behavior and action ways. The women characterized by independence tend to undertake responsibility for an event or a problem having occurred and for its subsequent solution. The women featuring personal helplessness tend to blame the failure situation on other people, external circumstances, or bad luck, dismissing their own mistakes.

Occurring significantly more frequently in the female patients featuring independence than in the women with personal helplessness, the family relationships internality is expressed in recognizing one's own responsibility for events taking place in the family. As for industrial relationships, externality is recorded in the female patients having personal helplessness; it points to the fact that the respondents tend to attribute an important meaning to events taking place at work, external circumstances, e.g., their managers, colleagues, luck or bad luck. By contrast, the female patients with independence are characterized by internality in their work relationships; this confirms that they believe their actions to be an important factor in organizing their own work activity, in the relationships formed within the collective, and in their career.

In terms of health and illness, internality is characteristic for the women featuring independence to a greater extent than the female patients with personal helplessness. High figures on internality in this sphere give evidence about the individuals holding themselves largely responsible for their own health. So, if one falls ill, one blames oneself for it and believes

convalescence mainly depends on one's actions and efforts. A person having a low indicator of internality toward health and illness – the external locus of control, – believes his or her health and illness are a result of chance and hopes for recovery resulting from other people's actions, as a rule, the doctors' ones.

Thus, as a result of the research conducted, significant distinctions have been found in indicators of overall internality, internality in family and industrial relationships, in the area of failures and achievements, health and illness. The women featuring independence interpret any significant life events occurring to them as a result of their own activity but not of the circumstances having formed. They tend to undertake responsibility in the sphere of their own achievements and failures, health and illness, as well as for events of their family and work life.

## 5 Conclusion

An oncological disease is a stressful event in and a threat to the human life and health. As for the nature of such diseases, there are suggestions that psychological factors and certain personal features can act as a trigger mechanism for the diseases, as well as contribute to their progression or recurrence. With regard to this, integrated studies aimed at gaining new knowledge about the risk factors of malignant neoplasms, cancer patients' survival, and particularities of the disease course become especially relevant.

As a result of studying the subjective control level in female breast cancer patients featuring personal helplessness and independence, it has been found that the women characterized by independence have the internal locus of control while the ones with personal helplessness tend to believe what occurs to them is a result of bad luck, set of circumstances, or a negative impact of other people. The comparative analysis conducted enables the authors to make the following conclusion: the female patients featuring independence believe themselves to be responsible for the results of their own activity, achievements and success, failures, any events in their family life and in the domain of work relationships to a greater extent than those with personal helplessness. Similarly, the female breast cancer patients characterized by independence believe themselves to be responsible for their own health and think convalescence largely depends on their actions.

The found distinctions will serve as a basis for developing programs of psychological support for cancer patients and for further empirical study of other psychological factors of survival and the disease course in patients having malignant neoplasms.

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