

**CDSSES 2020****IV International Scientific Conference "Competitiveness and the development of socio-economic systems" dedicated to the memory of Alexander Tatarkin****WORLDVIEW OF WOMEN WITH ONCOLOGY IN THE INDUSTRIAL REGION**

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Chelyabinsk State University, 129, Kashirinykh Br. St, Chelyabinsk, ivp-csu@yandex.ru**Abstract**

A healthy nation is a sign of a competitive state, but the natural population decline in Russia is increasing every year. Over the past ten years, the incidence of cancer among Russians has increased by 23.7%. Women most often have breast cancer - 20.6% of cancers among women. One of the risk factors for breast cancer is an environmental factor or environmental factor, which is considered the cause of 50% of unexplained disease cases. First of all, attention should be paid to the industrial regions with developed heavy industry, where the toxicity of the environment is high and, accordingly, the risks of malignant neoplasms are high. Modern psychological studies prove that cancer patients' survival rate is determined by a complex set of psychological factors, which may include the patient's worldview. The worldview is a set of fundamental beliefs about the world, good and justice, oneself and one's luck, and the ability to control what is happening. Therefore, the study aimed to investigate women's worldview with breast cancer at various stages of the disease, living in the Chelyabinsk region as an industrial region. Data were obtained on a positive worldview of women with breast cancer and the characteristics of the fundamental beliefs that accompany the disease's stages. The problem of the influence of mental trauma - oncological diagnosis on the worldview of women and untimely appeal for medical help is outlined.

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## 1. Introduction

The Chelyabinsk Region, as an industrial region with a nuclear incident in its history, is among the territories with high rates of cancer decrease. The incidence rates of malignant neoplasms are lower than in the world but higher than the all-Russian values. The Government announced in national goals and strategic tasks for the development of Russia for the period up to 2024 the need to reduce the mortality rate of the population from malignant neoplasms and develop and implement programs to combat cancer with the involvement of science in solving this problem. Breast cancer is the most common cancer among women. Modern psychological research proves that the course of the disease of patients with cancer and their survival is determined by a complex set of psychological factors, which includes the patient's cognitive beliefs (Lenzo et al., 2020; Quattropiani et al., 2016). In a fatal disease situation, cognitive ideas about oneself, about others, and the world around us are an essential factor in adaptation (Padun & Kotelnikova, 2012). Women with a positive worldview and positive cognitive beliefs will be recovery-oriented, and vice versa, those with negative beliefs will not believe in treatment.

## 2. Problem Statement

The study of psychological factors affecting the course of cancer is necessary. Studies prove that a complex set of psychological factors determines patients' survival rates with malignant neoplasms (Tsiring et al., 2019). This system of factors also includes the cognitive view of patients' world, their idea of the world around them, other people and themselves (Cook et al., 2015). Various stages of the oncological disease are characterized by their symptomatic specificity and psychological characteristics of the individual (Thewes et al., 2013).

## 3. Research Questions

Based on the relevance and problems of the study, the following research questions were posed.

### 3.1. What are the cognitive beliefs about the world around, themselves, and other people characterizing the worldview of women diagnosed with breast cancer?

The answer to this question will make it possible to judge the cognitive characteristics of women diagnosed with breast cancer as factors in the disease.

### 3.2. Are there features of the worldview of women with breast cancer at various stages of the disease?

Data on the specific characteristics of fundamental beliefs in women with breast cancer at various stages will allow tracking the risks of the course of cancer and outline strategies for psychological work.

#### 4. Purpose of the Study

The study aims to study the worldview of women with breast cancer at various stages of the disease, living in the Chelyabinsk region as an industrial region.

#### 5. Research Methods

The study's methodological basis was the cognitive-experimental theory of personality by S. Epstein, which was developed in the concept of mental trauma by Yanoff-Bulman and became the theoretical basis for the methodology "Scale of basic beliefs" (Padun & Kotelnikova, 2012). The study's design assumes an analysis of the worldview of women with breast cancer at various stages of the disease (N = 138) living in the Chelyabinsk region.

#### 6. Findings

Psychodiagnostics of women's cognitive beliefs with breast cancer included in the worldview, who was first diagnosed with cancer at various stages of the disease, was carried out (Konieczny et al., 2020). Empirical data have been obtained that testify to the specific worldview of women with breast cancer (BC) living in the Chelyabinsk region. The data are presented in Table 1.

**Table 1.** Average values of indicators of the worldview of women with BC

Worldview indicators	Average value	Standard deviation
The benevolence of the world	35.1	6.4
Justice	21.9	4.4
The image of I	28.8	5.8
Luck	32.0	6.4
Belief about control	26.1	4.6

Based on empirical data, we can draw the following conclusions. Despite the fatal diagnosis, women with breast cancer are convinced of the world's benevolence around them, a relatively safe opportunity to trust him (M = 35.1). Following the normative data, the indicator of the goodwill of the surrounding world reaches high values, which reflects the beliefs of women with breast cancer that the world as a whole is a worthy place to live; failures in it are quite rare (Anderson et al., 2019). The fundamental belief about the fairness of the surrounding world includes two categories: fairness (M = 21.9) and the belief about control (M = 26.1), which reach the average value relative to the test norms of

the method. The findings are consistent with previous studies that found that breast cancer women are characterized by self-control as a coping strategy (Vazhenin et al., 2019). The fundamental belief about the value and significance of one's "I", characterized by the indicators of the subscales "Image of I" (M = 28.8), and "Luck" (M = 32), reaches high values according to the normative data of the diagnostic method (Cobo-Cuenca et al., 2019). However, fundamental beliefs regarding a positive worldview (positive self-image, goodwill of the world around us, and fair relations between the self and the outside world) are most susceptible to mental trauma. Overnight, a woman is faced with the horror of a cancer diagnosis and her vulnerability and helplessness in a fatal disease (Cheli et al., 2019).

To identify the features of the worldview of women with cancer of the gland at various stages of the disease and living in an industrial region, we carried out a comparative analysis of cognitive beliefs. The results of one-way analysis of variance are presented in Table 2.

**Table 2.** Comparative analysis of the worldview indicators of women with BC at different stages of the disease

Worldview indicators	Stage of disease	N	Average value	Significance level
The image of I	1	68	27.83	0.006
	2	54	31.07	
	3	16	28.31	
Belief about control	1	68	25.22	0.031
	2	54	27.37	
	3	16	24.94	

Analysis of the data demonstrates the fact that there are significant differences in two cognitive beliefs: Self Image and Belief of Control. These categories of implicit personality beliefs are included in the fundamental belief about the value and significance of their own I (Sehati Shafae et al., 2018). To obtain verified data on the features of the worldview accompanying a specific stage of the course of a malignant neoplasm, we conducted multiple comparisons (post hoc tests) using the Scheffe test.

Multiple comparisons showed significant differences in the fundamental beliefs about their value and significance in groups of women with stages I and II of the disease. In particular, women with stage II breast cancer are distinguished by a high indicator of the cognitive categories Self-image (p=0.007) and Belief about control (p=0.049). Thus, women who have a more pronounced indicator of their significance and value seek medical help when the disease has reached stage II (Klassen et al., 2008). It can be assumed that these women later went to a medical institution because they were confident that they could

control events and turn them in their favor (Lenzo et al., 2018). This fundamental belief maintains a sense of one's invulnerability. This, in turn, can lead to untimely access to oncologists and, consequently, the risk of disease progression and poor prognosis.

## 7. Conclusion

The worldview of women with breast cancer living in an industrial region has a positive worldview around them and their own "I", women believe that people around are friendly, trustworthy, decent, always ready to help (Ng et al., 2020). The worldview also includes the belief that good and bad events are distributed among people according to the principle of justice and the belief that women can somehow control events that happen to them. Particular attention should be paid to women who sought medical help at stage II of the disease. They are distinguished by a greater conviction in the value and significance of their own I, which can be manifested in the belief about the control of events, and the presence of ideas about themselves as worthy of respect, love, and care their invulnerability. According to the theory of mental trauma by Yanoff-Bulman, a positive worldview is most susceptible to the influence of mental trauma, in our case, an oncological diagnosis, which entails a state of disintegration. Besides, there is a negative effect from the conviction of one's invulnerability, which consists of the risk of untimely referral to a medical institution, delaying the start of cancer treatment. In connection with these features of the worldview of women living in the Chelyabinsk region, it is necessary to provide professional psychological support to women to restore fundamental beliefs and reduce the risks of an unfavorable course and outcome of the disease.

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