

Time perspective of a women with cancer: research results from a border region

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Abstract. In contemporary society, with the increasing number of people with cancer, the problem of increasing interest in cancer diseases of female reproductive organs is particularly acute. This is associated with a significant rejuvenation of the contingent of patients suffering from malignant neoplasms of the gynecological system and the breast. An empirical study has revealed that the inability to control one's life in a disease can lead to the loss of a person's temporal perspective, meaning of life, deformation of psychological time. This article discusses the specific features of the time perspective (according to the methods "Cyclic test of time" by T. Cottle and "Time perspectives" by F. Zimbardo) of cancer patients to be combined and surgical treatment.

Keywords: time perspective, cancer, women with cancer, patients, disease, treatment, surgical treatment

1. Introduction

Time as a psychological construct is a link between all structures of reality, permeates all spheres of human activity, since all external (natural, social, economic) and internal (mental) processes occur and unfold in time. F. Zimbardo and his colleagues argue that a time perspective is the main aspect in the construction of psychological time, which arises from cognitive processes that divide a person's life experience into a time frame of the past, present, and future [9]. K. Levin considered a time perspective as an individual's vision of his future or past in his present, and he assumed that cognitive activity and emotions about the past or the future may influence actions, emotions, and cognitive activity in the present, as well as future aspirations [3]. T. Cottle in his work understands a time perspective as the ability of the individual to act in the present in the light of the prediction of relatively separate future events [6].

In the Altai region, I. A. Ralnikova, O. S. Gurova, E. I. Ippolitova are engaged in empirical studies of the psychological time and temporal perspective of the individual in the context of transformation in various life situations. So, in their opinion, such life situations as disability, divorce, drug use, job loss, subjective feeling of loneliness, experiencing age crises, etc. directly affect the transformation and, sometimes, the deformation of the individual's time perspective [6].

The future becomes problematic, unpredictable and loses its positive valence, the present is chaotic, and their access to the past, which can be a resource, is unachievable. Loss of certainty leads to disorientation of the goal and the emergence of anxiety [6].

From the point of view widespread in Clinical Psychology, one of the crisis situations is an oncological disease, since it has the following specific features: suddenness in the presence of a vital

threat, lack of control over the situation, uncertainty of the future, destruction of the world picture, a certain staging of the course of both the disease and reactions to it [1]. E. B. Karpova, and V. A. Chulkova note that by its psychological essence, cancer is a critical life situation in which a person experiences a serious shock and is forced to perform adaptive activities in accordance with the conditions that this situation gives him.

The study of the psychological timeframe of women with cancer diseases of the reproductive system is of particular relevance for the Altai region. In Russia, more than 300,000 cancer patients die every year. 46% of them are women. In the Altai region, 12,466 new cases of cancer were diagnosed in 2018. Last year, the figure increased by 3%. Breast cancer, skin cancer, and uterus cancer occupy the first places in the structure of the incidence of malignant tumors of the female population. Currently, a large number of studies on breast cancer and the reproductive sector in general have been conducted (T. Yu. Marilova, 1986; E. F. Bazhin, A. V. Gnezdilov, 1988; E. V. Demin, V. A. Chulkova, 1990; O. N. Sharova, A. V. Vazhenin, 2000, etc.). Thus, we have found that cancer of the reproductive system is marked with a great psychological trauma, even in a number of other types of cancers. This is due not only to the fear of illness, the emergence of a threat to life, the collapse of plans, but also the need to undergo a mutilating operation. In addition, with respect to this group of diseases, the so-called “feminine factor,” including the fear of losing femininity due to the loss of organs symbolizing it, becomes significant [4, 8].

According to contemporary studies, cancer patients feel hopelessness of their position, which blocks the normal course of life. Survival of a cancer situation is accompanied by the fear of death and restriction of life in a subjective view [3]. In this regard, we assume that the oncological pathology of the reproductive system narrows and distorts a time perspective in women. To test this assumption, we conducted an empirical study. The purpose of the study was to study certain peculiarities of the influence of the oncological pathology of the reproductive system on the time perspective in women with cancers of the reproductive system who are subject to combined and surgical treatment. Theoretical and methodological basis of the study was the field theory and the model of living space K. Lewin, the concept of time perspective F. Zimbardo.

2. Materials and Methods

Our empirical research was conducted on the basis of the Barnaul Oncologic Dispensaries. Women from 30 to 55 years old (50 people in total) with cancers of the reproductive system (breast cancer, uterus, and ovaries) participated in the study.

They were divided into two groups. Those patients being in need a combined treatment (receiving radiation and chemical therapy during the examination period without removing the organs of the reproductive system) were included in the first group (25 women). Patients who were subject to surgical treatment (25 women after complete or partial removal of the reproductive organs) were included in the second group.

The following set of research methods was used in the study: questioning, the method of “Cyclic test of time” by T. Cottle, the technique “Time perspectives” by F. Zimbardo, as well as methods of mathematical-statistical data processing (Kolmogorov-Smirnov criterion, non-parametric Mann – Whitney U criterion, Spearman's correlation analysis), using the “SPSS Statistics” computer program.

3. Results

A qualitative analysis of the results obtained using the “Cyclic test of time” technique by T. Cottle suggests that the cancer patients with combined treatment are characterized by an average degree of connectedness of time zones (2.85 ± 1.18) – past, present, and future. At the same time, the structure of temporal representations has the following form: circles made by patients are depicted linearly and continuously in 49%, they intersect and join each other quite often, which testifies to the perception of psychological time by the subjects as being integral, continuous. The ratio of past, present, and future periods of time for them is 43% (past), 24% (present), and 33% (future).

Patients with surgical treatment are characterized by a low degree of connectedness of the time zones (1.16 ± 0.98). At the same time, the structure of time representations in women of this group has the following form: the circles depicted represent an atomic picture characterizing their perception of time as discontinuous, fragmented in 65%. Drawn circles are sinoy discrete arcs from each other, and at the same time their diameter is very small (on average 1.5 ± 2.4 cm). The ratio of past, present, and future periods of time for them is as follows: 53% (past), 35% (present), 12% (future).

Our analysis of the data obtained using the time perspective according to F. Zimbardo's methodology shows that a temporary orientation towards a positive past ($M = 3.95$) prevails in cancer patients with combined treatment. Indicators on the "future" scale are not very different from the norm, which indicates organization and purposefulness ($M = 3.27$). Cancer patients with surgical treatment have high rates on the "fatalistic present" scale both in comparison with other scales and in comparison with the norm ($M = 3.46$). A low score on the scale of the future is determined primarily by stress and anxiety about obscurity, possible fear of the future ($M = 3.09$).

To test the accuracy of the time perspective differences in patients with surgical and combined treatment, we conducted a comparison procedure using the non-parametric U-Mann-Whitney test for independent samples. Significant difference in the following indicators was revealed: preference and significance of the past ($U = 123$; $p < 0.001$), present ($U = 147$; $p < 0.004$), and future ($U = 147$; $p < 0.004$), as well as tendencies to the difference in the preference of the fatalistic present ($U = 137$; $p < 0.002$) and positive past ($U = 193$; $p < 0.048$).

As a result of the correlation analysis, we determined that the more cancer patients of both groups are focused on the past, the less they enjoy in the present ($r = -0.518$, $p < 0.0001$). At the same time, they believe more in the predestination of fate ($r = 0.397$, $p = 0.005$). Patients with a future orientation have a high degree of connectedness of time zones $r = 0.675$ ($p < 0.0001$), and they less believe in the fatality of fate $r = -0.485$ ($p < 0.0001$). Also, positive correlations were found between such indicators as orientation to the "Future" and "Linear-continuous time perspective" ($r = 0.399$, $p = 0.05$), as well as for the orientation to the "Hedonistic present" and "Discrete temporal orientation" ($r = 0.515$, $p = 0.01$). These data indicate that the integrity of the time perspective of women suffering from cancer of the reproductive system is closely linked to the ability to plan their own future. In turn, this affects the psychological well-being, satisfaction with the subjects' own lives.

Thus, when analyzing the time perspective of women with cancer of the reproductive system, we find significant differences between the rates of patients subject to combined and surgical treatment. And also, we identified correlations between different parameters of the time perspective of both groups of subjects.

4. Discussion

Based on the data obtained, we can say that a time focus on the positive past prevails in women with cancer with combined treatment. This means that in their present, these people rely on past experience, which is based on the positive aspects of life before the disease. In this case, a person does not see acceptable ways of organizing his life activity in the upcoming stages and seeks to find resources to overcome the crisis situation in his past. It should be noted that, unlike healthy women, the past becomes the only source of experience and hope in patients. This refers to their subjective reality, and not to an objective reconstruction of the events that occurred with them. On the one hand, focusing on a positive past allows one to extract the best of the most difficult situations and effectively plan the future, avoiding past mistakes. On the other hand, excessive adherence to this orientation prevents one from moving forward. Such people tend to try to maintain the current state of affairs without trying to improve them. This is confirmed by low scores on the "negative past" scale. At the same time, the orientation towards the future in 33% of women suggests that patients live with hope ("it is necessary to get medical treatment, solve health problems, and everything is normalized.")

High performance on the scale "fatalistic present" by women with surgical treatment suggests that, in general, the present for them looks uncontrollable. They understand that they are not fully able to influence their lives, their health; therefore, they cannot afford to enjoy the present, and nothing

depends on them. Their way of life is controlled by the forces that they cannot influence. It should be noted that a very small percentage of women in this group believe in their own success in combating an illness (approximately 40%) do not believe in a cure and characterize their illness as an unpromising future. Also, 50% of them rely on the will of fate.

A very low score on the “Future” scale is determined primarily by stress and anxiety about uncertainty, possible fear of the future. It is during conversations about the future that an increase in anxiety and tension is observed in patients. Due to psycho-emotional stress and lack of proper sleep, the image of their own weakness, doom, begins to form in patients after surgical interventions. As a result, irritability, aggressiveness, outbursts of anger, followed by apathy, lack of faith in yourself and a favorable outcome of the disease appear in patients. Patients withdraw into themselves, may stop talking and communicate.

In our study, we examined the age specificity of a temporal perspective over time, under conditions of cancer, and also conducted a comparative analysis of indicators of the temporal perspective with healthy women from our studied conducted in 2013 [2]. According to the results of P. V. Zarubin and A. Syrtsova, healthy women (up to 39 years old) negatively perceive their own past, while cancer patients after 40 years have a decrease in negative attitudes towards the past, which is most likely associated with rethinking life after an illness. The severity of orientation to the hedonistic present in cancer patients up to 49 years higher than in healthy people. So, patients of this group are characterized by the desire to get pleasure at the present moment of time, not postponing for the future, which may not even be. At the trend level, we observed a slight decrease in indicators on the “Future” scale among cancer patients between 30 and 39 years, as well as after 50. On the “fatalistic present” scale, we observed similar dynamics in women with oncology of the reproductive system and healthy women in 2013 studies, but with higher scores on the scale. Cancer patients have a more pronounced belief that the present and the future are predetermined, i.e. it is impossible to influence the future with one’s own actions, it simply cannot be controlled, and the present should be tolerated with humility.

Thus, the data obtained in the study suggests that women with cancer of the reproductive system have deformations in the time perspective. In turn, this leads to violations in the integrity of the picture of their own lives, which requires a timely psychological correction.

5. Conclusion

The results of the study served as the basis for the development of a draft program for the psychological support of cancer patients in hospitals. Based on the data obtained, counseling conversations with patients were conducted with the aim of optimizing their attitude to their illness through normalizing the experience of psychological time, restoring their integrity of the time perspective. Thus, restoring the deformation in the time perspective of cancer patients, we can stimulate the growing positive effect of medical treatment of this category of people.

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