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MECHANISMS OF STRESS-OVERCOMING BEHAVIOR IN WOMEN WITH ONCOPATHOLOGY

Bohdan Stanovskiy

Bohomolets Medical University

<https://orcid.org/0000-0003-3607-0812>

Abstract

The article describes the empirical research of the features of stress coping behavior in patients with newly diagnosed oncopathology. The author's attention is directed to the analysis of the chronic social stress impact on the psychological state of women with cancer due to its relevance in modern social conditions. The article highlights the hypothesis that the effectiveness of stress coping behavior and the general psychological state of patients are closely related to the quality and specificity of provided psychological support. Particular attention is paid to the study of the connection between individual strategies for stress coping and social factors, in particular, family support, dealing with friends and medical personnel. The research is based on an interdisciplinary approach, including knowledge from medicine, psychology, sociology, and other fields for a deeper understanding of the mechanisms of stress coping behavior in patients with oncology and the development of a comprehensive support strategy considering a wide range of factors: from individual characteristics to social living conditions. The conclusions of the empirical study are important for the practice of medical psychology and further research in the field of psycho-oncology.

Key words: oncopathology; psycho-oncology; stress coping behavior; stress coping; women; psychosomatics; stress; anxiety; depression; quality of life; psychological adaptation.

Relevance. In recent decades, medical science and practice have faced the global growth of oncological diseases, which requires not only the improvement of treatment methods, but also the development of complex approaches to the psychological support of patients. According to the National Penitentiary Register in Ukraine, as of the beginning of 2024, there are 1,272,610 cancer patients on the register. Considering such a large number of cancer patients, the study of the features of stress-overcoming behavior is of particular importance .

Coping (from the English "coping" - cope with) is a set of strategies and methods that an individual uses to effectively deal with stressful situations, difficulties or challenges . These can be both conscious efforts and unconscious mechanisms aimed at minimizing, avoiding or transforming stress and emotional discomfort arising from encountering a problem or threat. [1, 2]

Coping is important in stress-overcoming behavior, because effective coping strategies allow an individual to adapt to changed life circumstances, reduce the level of psychological and physical stress, and also maintain or restore psychological well-being [8]. There are two main types of coping strategies. Problem-oriented coping is aimed at solving a problem or changing a stressful situation. Emotionally oriented coping is focused on regulating the emotional response to a stressful situation.

Both types of coping strategies are important and can be used simultaneously depending on the situation and individual characteristics of the person. It is important to understand that the effectiveness of coping strategies can vary depending on the context and personal resources of the individual.

Individuals facing cancer often turn to emotion-focused coping strategies, such as seeking emotional support from family and friends, engaging in pleasurable hobbies, or seeing a psychologist, which help reduce emotional distress and feelings of isolation. At the same time, they can also activate problem-oriented strategies, such as actively searching for information about their disease and treatment methods, participating in decision-making regarding the treatment plan, or changing their lifestyle to improve their general health [3].

Depending on the individual characteristics of the person and their social environment, some patients may resort to strategies of avoidance, attempts to distract themselves, or efforts

not to think about their illness. Although these strategies can temporarily reduce the level of stress, they are usually not effective in the long term and can lead to a decrease in psychological well-being [3].

Connecting with other patients who are going through similar trials, through support groups or online communities, can help develop adaptive coping strategies. This contributes to a sense of connection, understanding that others are experiencing similar challenges, and can inspire a positive attitude towards life and treatment [6].

Thus, understanding the relationship between diagnosis, the choice of coping strategies, and their impact on psychological well-being is important for the development of holistic support programs that take into account both the medical and psychological aspects of cancer treatment.

Psychological support of patients with oncology requires a deep understanding not only of the psychological aspects of the perception of the disease, but also of the features of stress-overcoming behavior, which may vary depending on the individual characteristics of the personality, socio-economic conditions, cultural context and other factors. This emphasizes the relevance of research in the field of psycho-oncology and the justification of a comprehensive strategy of patient care, which includes both medical treatment and psychological support [8].

Formulation of goals and setting of tasks of the article. The purpose of this article is to study the features of stress-overcoming behavior in patients with newly diagnosed oncology.

Presentation of the main research material

In order to study the stress-overcoming behavior of patients with newly detected oncological pathology in the field of women's health, we conducted an empirical study in which 120 women enrolled in the Kyiv City Clinical Cancer Center. The age of the subjects is from 18 to 65 years. The age group from 36 to 45 years – 32 women – had the highest percentage ratio. Among the studied women, there were 48 with breast cancer, 33 with ovarian cancer, 22 with cervical cancer, and 17 with endometrial cancer. In addition, the respondents differed in the stages of cancer: 37 women were in the first stage, 53 in the second, 26 in the third, and 4 in the fourth. The sample was divided into two groups: the study group (n=60) and the comparison group (n=60) based on the informed consent of the study participants.

Table 1

Characteristics of the studied group and the comparison group

Group	Age range	Average age	Diagnosis
Research group	25-65	45	Oncological diseases of women's health
Comparison group	25-65	46	

Statistical analysis of the data was carried out using descriptive statistics methods, the Shapiro-Wilk test to test the normality of the distribution, Spearman's rank correlation coefficient or Pearson's linear correlation coefficient to study the relationship between quantitative traits, analysis of variance to study the variability of dependent variables, and regression analysis to study predictive value of changes.

The Mini-MAC (Mini Mental Adjustment to Cancer) scale was used in the study to assess the psychological adaptation of women to an oncological diagnosis [4, 6]. The results provide an insight into the dominant type of adaptation of the patient to the disease, which is key for the development of individual psychological support plans.

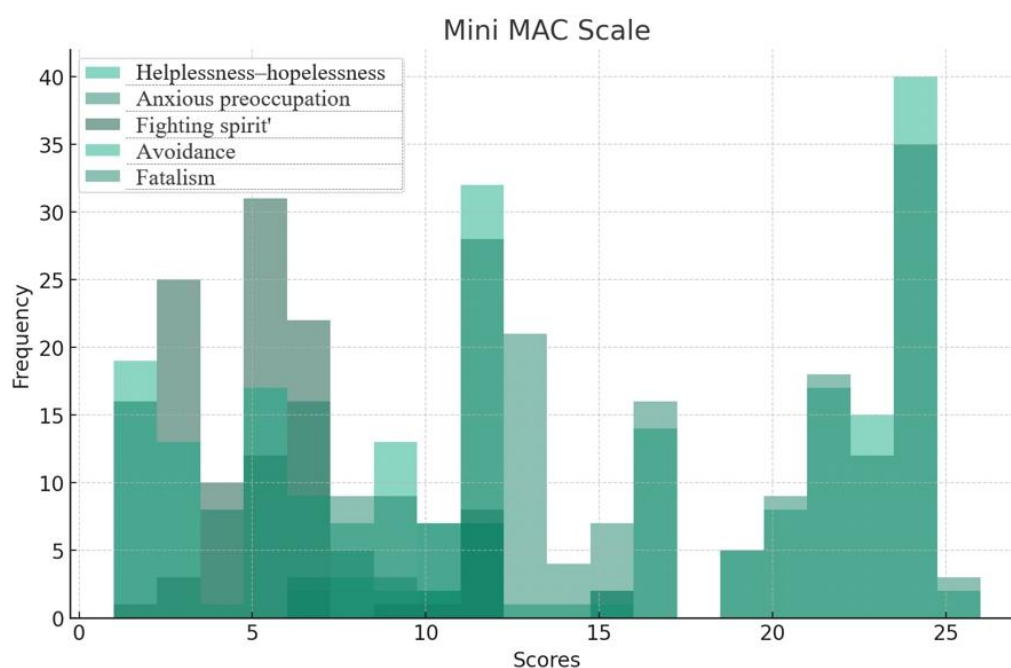


Fig. 1. Comparative analysis according to the Mini MAC scale

Boxplots and histograms reflect a significant diversity in estimates, which indicates individual differences in the strategies of adaptation of patients to an oncological diagnosis (Fig. 1). Special attention should be paid to high scores in the "Helplessness-Helplessness" subscale, which may indicate a risk of developing depressive conditions.

The COPE scale was used to determine the predominant coping strategies that people use to cope with stressful situations. This scale covers a wide range of strategies, including active problem solving, denial, acceptance, and others [5]. The data obtained on the COPE scale allow us to assess the variety of coping strategies (Fig. 2).

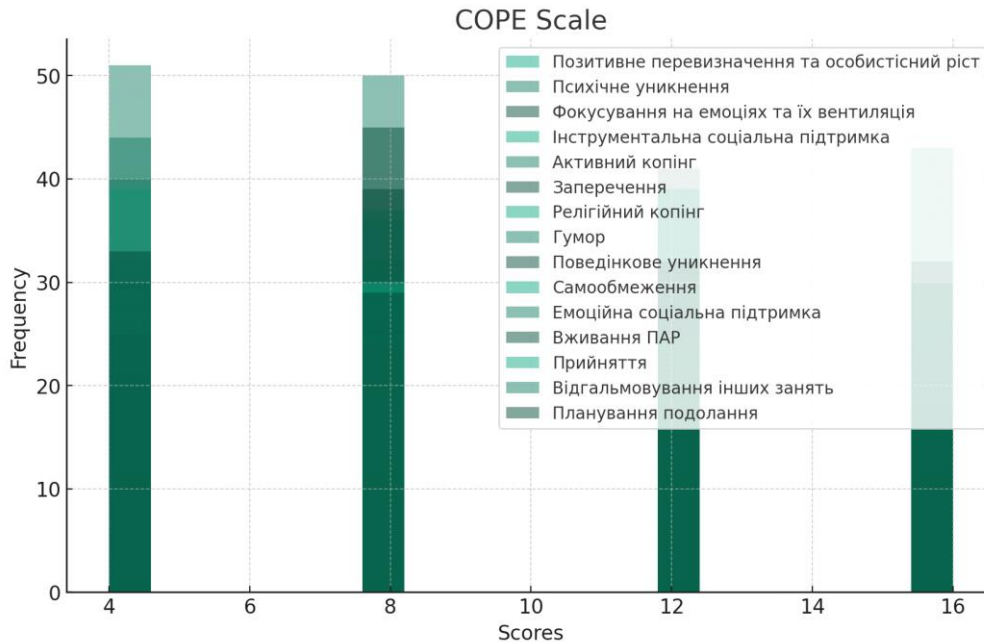


Fig. 2. Analysis according to the COPE scale

High indicators in the categories "Positive redefinition and personal growth", "Active coping" and "Emotional social support" indicate the availability of resources for effective adaptation. At the same time, values in the Mental Avoidance and Denial categories may indicate less adaptive strategies that require attention from medical and psychological professionals.

The HADS scale is designed to assess levels of anxiety and depression in people with somatic illnesses. This tool consists of two subscales, each of which contains 7 items, which allows for separate assessment of anxiety and depression [1; 3]. The Chaban Quality of Life Rating Scale is designed to assess how cancer affects patients' general well-being and their perception of quality of life. The HADS scale, together with the quality of life assessment, revealed high levels of anxiety and depression among the patients, affecting their overall quality of life (Figure 3).

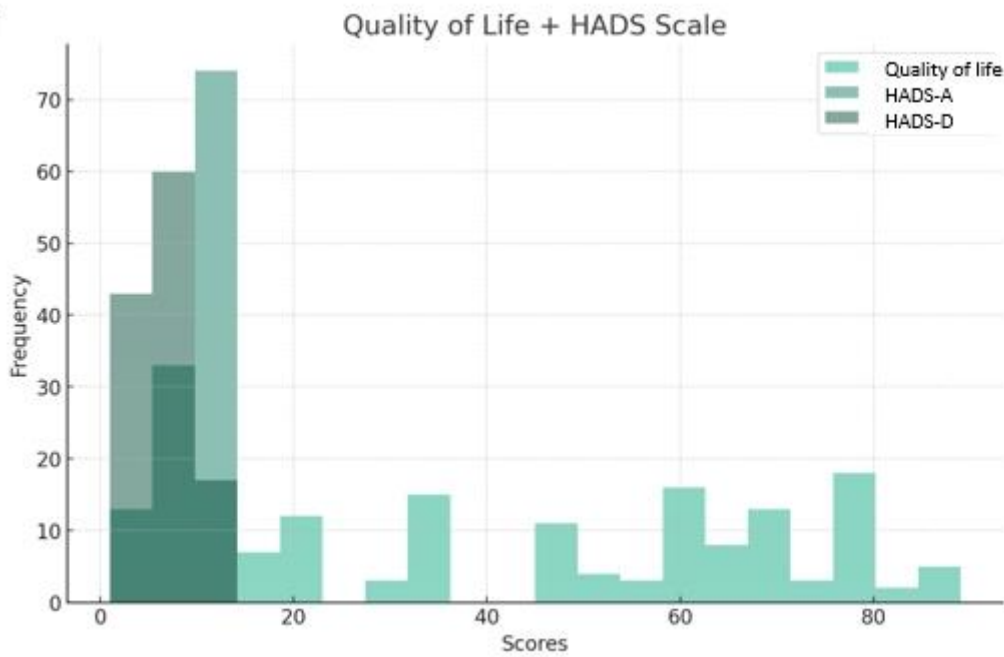


Fig. 3. Comparison of CQLS and HADS quality of life scales

The analysis showed that significant psychoemotional challenges faced by patients can significantly affect their perception of quality of life, emphasizing the importance of a comprehensive approach to treatment that includes psychological support.

A comparative analysis of the results on the COPE, HADS and Mini MAC scales, as well as the assessment of quality of life, provides valuable information about the psychological state of patients with oncology. The variety of strategies of adaptation, coping, levels of anxiety, depression and quality of life emphasize the need for an individualized approach in providing psychological support. Identifying key areas of risk allows you to focus efforts on the most vulnerable aspects of the psychological well-being of patients, contributing to more effective adaptation to the disease and improving the quality of life.

A statistical analysis of the relationships between the indicators of the Mini MAC scales, the quality of life of the CQLS and the HADS was carried out. The results of the analysis are displayed in the form of a heat map of correlations, which demonstrates the degree of connection between various indicators in these scales (Fig. 4).

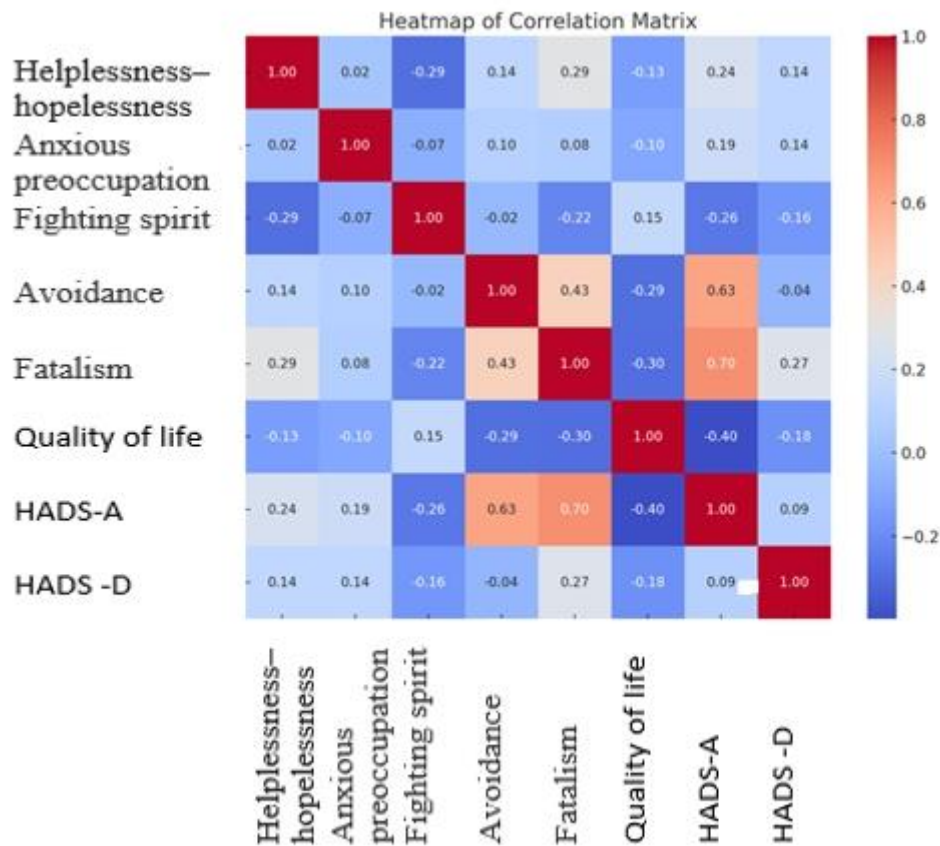


Fig. 4. Comparison of miniMAC results with the CQLS and HADS quality of life scales

Correlation analysis showed that there are significant relationships between psychological adjustment indicators, measured by the Mini MAC scale, and anxiety and depression indicators according to the HADS scale, as well as quality of life. In particular, the following was discovered:

- Helplessness-Helplessness is positively correlated with HADS-A (anxiety) and HADS-D (depression) scores, suggesting that higher levels of helplessness and helplessness are associated with higher levels of anxiety and depression.
- Cognitive Avoidance and Fatalism show strong correlations with the HADS-A, highlighting the link between avoidance strategies and higher levels of anxiety.
- Quality of life is negatively correlated with HADS-A and HADS-D, indicating that higher levels of anxiety and depression are associated with lower quality of life scores.

The given results emphasize the importance of considering psychological aspects in the process of diagnosis and treatment of patients with oncology.

It was proven that there is a strong correlation between the Cognitive Avoidance and Fatalism scores with the HADS-A (Anxiety) score, indicating a significant influence of these avoidance strategies on the anxiety level of female patients. We will also note the negative impact of high levels of anxiety and depression on the quality of life, which emphasizes the importance of psychological support in the complex treatment of oncopathologies (Fig. 5).



Fig. 5. Analysis of the dependence of the quality of life on the psychological state

The analysis of relationships shows that psychological factors, such as anxiety, depression, adaptation methods and avoidance strategies, play a key role in shaping the general well-being and quality of life of cancer patients. These data emphasize the need to integrate psychological interventions into standard treatment protocols to help patients adapt more effectively to the diagnosis, reduce the level of psychological discomfort and improve the overall quality of life.

The analysis of the relationships between the Mini MAC, HADS and quality of life scales allowed us to confirm the following hypotheses: with an increase in the indicators of anxiety and depression, there is a decrease in the ratings of the quality of life of patients; the strategy "Mighting spirit" shows a negative relationship with anxiety and depression, indicating their adaptive nature; the strategy "Helplessness-Helplessness" has a positive correlation with these conditions, which indicates the potentially destructive effect of such strategies on the psychological well-being of female patients.

The conducted analysis confirms the close connection between the psychological state of the patients, their strategies of adaptation to oncology, and the perception of the quality of life. The results of the analysis indicate the need to integrate psychological support into a

comprehensive approach to the treatment of oncological diseases, in order not only to improve the physical condition of patients, but also to optimize their psychological well-being and quality of life.

Conclusions. Based on the generalization of the above, the following conclusions can be drawn:

1. The emotional state of cancer patients is closely related to their perception of quality of life, where higher levels of anxiety and depression cause worse adaptation to the disease.

2. Adaptive strategies for coping with stress, such as active problem solving and positive reconceptualization, have a positive effect on the psychological well-being and quality of life of female patients.

3. The results confirm the need to integrate psychological support into a comprehensive approach to the treatment of oncological diseases to improve the psycho-emotional state and general well-being of patients.

Therefore, on the basis of the conducted analysis, it can be stated that high levels of anxiety and depression, determined by the HADS scale, have a negative impact on the perception of the quality of life of patients. This confirms the importance of emotional well-being for overall well-being and points to the need for integrated treatment approaches that include psychological support. Adaptive coping strategies such as Fighting Spirit are associated with lower levels of anxiety and depression, suggesting a positive effect on the psychological well-being of female patients. At the same time, strategies related to "Helplessness-Helplessness" are correlated with higher levels of these states, which indicates the need to develop interventions aimed at strengthening psychological resilience. The obtained data emphasize the need to expand the practice of medical and psychological support of cancer patients, including the development of individual psychological support plans and interventions aimed at improving adaptation to the disease and reducing psycho-emotional stress.

Prospects for further research

The influence of medical and psychological interventions on coping strategies in the aspect of their effectiveness, that is, the ability to change to the use of more adaptive methods, in cancer patients is one of the priority areas of research.

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