THE EMOTIONAL ADJUSTMENT IN THE PROCESS OF RESTORATIVE ART-THERAPY: THE EXPERIENCE OF INTERDISCIPLINARY RESEARCH

Liudmila D. Lebedeva Institute of Positive Technologies and Consulting Moscow, Russia

Abstract

Long-term changes in neuropsychological status of the female body (emotional deprivation, depression, neuroses) contribute to the development of cancer. Novelty of the research includes the evidence of influence of art therapy on emotional adjustment of cancer patients, the reliability of laboratory-confirmed levels of oxidative stress and cytokines (regulatory proteins) as a prognostic indicator in the assessment of neuroendocrine cancer patients. Program of Restorative Art Therapy proved efficiency of changes in emotional stability, motivation to recover, improvement life quality of cancer patients.

Keywords: art therapy, psychosomatics, emotional adjustment, environmental and psychological approach, oncology disease (breast cancer).

Introduction

Each art session with cancer patients is completed with the creation of an artistic image with positive resource content. Its visualization and verbalization promote self-reflection and taking determined decisions, which is a trigger to improve the overall psychological well-being, and in the long term provide positive dynamics of emotional adjustment. Against the background of the art therapy process we observed a decrease in the number of complaints of the autonomic disorders. The number of women with a harmonic type of emotional response has increased. They have overcome a feeling of hopelessness, reduced situational anxiety over the possible adverse course of the disease and complications. They generally sought to promote a positive outcome of treatment.

The relevance of the topic of the emotional adjustment in the specialists of socio-economical professions is caused by the complex of factors that accompany the professional activity of the type "person-person". Sociocultural changes of the contemporary society alongside with the progress enhance stressogenic factors, which leads to the increased emotionality and tension of the psychical state of a personality. These tendencies are especially stable in the education system. According to the statistical data (Human Development Index, 2008) it has been noticed that among women who have worked for a long time in the education system there is an increase of psychosomatic and oncology diseases, the most widely spread among them is breast cancer. In the treatment of the disseminated forms of this disease the task to maintain the long-term quality of life of women including its most important indicator – psychoemotional status – becomes of prime importance.

The emotional adjustment from the viewpoint of eco-psychological approach presupposes the overcoming of the complex impact of the extreme surroundings, decrease and elimination of the consequences of psychotraumatic experiences, negative attitudes, uncertainty about their abilities, anxiety, fear of the relapse of the disease, etc. (Гнездилов, 2002; Семке, 2003). To date in science it has been convincingly argued that the emotional adjustment leads to the development of emotional stability. This contributes to the achievement of the positive effect of the treatment.

In Russian psychology the holistic concept of the stability of the personality has been suggested by Божович (1966). Modern research in the context of closely related concepts

(vitality, resilience, psychological endurance, resistance, aspects of emotional stability) is conducted at the level of the integration of scientific knowledge (Баева, 2002; Панов, 2001, 2004).

The problems of emotional stability were started to be analyzed in various aspects by Аболин (1987), Василюк (1984), Захаров (1995), Дьяченко & Пономаренко (1990) etc., later they were transferred to psychooncology studies by Гнездилов, (2002), Семке (2003) who revealed the influence of emotional experiences on the pathogenesis of malignant tumours.

The relation between the vegetative (sympathetic) and immune systems with the participation of the endocrine system explains why stress and suboptimal functional states lead to the disorder of the immune system and oncology diseases (Данилова, 1998). The tension of the life environment leads to the increased tension of the psychical state of an individual (Основные подходы и методы психотерапии, 2005). In numerous foreign publications it has been shown that emotional tension in cancer patients remains for many years and is characterized by subjectively experienced anxiety, concern, and nervousness (Clarke, 1995; Spiegel, Bloom, Kraemer, & Gottheil, 1989; Walsh, Martin, & Schmidt, 2004).

Many researchers point out the effectiveness of art-therapy in psychological support of cancer patients (Аллан, 1997; Гудман, Скотт, 2008; Кюблер-Росс, 2001). General regularities of the course of stress reactions (Меерсон, 1981) imply that long-term changes of neuropsychical status of the organism (emotional deprivation; depressions, neuroses, etc.) facilitates the development of the oncology disease, the treatment of which leaves deep trace in a woman's mind for many years.

Relevance of the problem.

Constant memories of the disease they have experienced and a radical surgery cause difficult emotional experiences followed by the feelings of helplessness, rejection, loss of femininity, inferiority, defectiveness, fear of possible social isolation and breaking of the family. According to the interdisciplinary research, only 15% of female cancer patients can independently cope with emotional difficulties, meanwhile, 85% are in need of an effective assistance (Лебедева, 2011). Consequently, alongside with modern forms of medical treatment, complementary psychocorrection of an emotional state of cancer patients by adequate means including art-therapy is necessary. It is the trend that permits to tactfully and ecologically, through artistic creation, facilitate the emotional adjustment of a patient and establish a psychotherapeutic contact with her. Complicated mechanisms of the pathogenesis of breast cancer accentuate a psychoemotional component of this disease.

Complex research on this socially relevant problem has allowed to substantiate the effectiveness of the application of restorative art-therapy. The justification of the results of the emotional adjustment is based on the objective indicators of biochemical processes in the organism through evidence-based practice of art-therapy.

Object of the research. The process of the emotional adjustment of women with the oncology disease in the process of restorative art-therapy.

Aim and objectives

In accordance with the posed problem it is aimed to:

- 1. Find out the eco-psychological mechanisms of the influence of restorative art therapy on objective indicators the state of the homeostasis of the organism, emotional stability and life quality of the patients who constantly experience, due to the specifics of their professional activity, emotional influence of the conditions of the "extreme surroundings".
- 2. Specify and complement the images of the emotional stability of a personality in the situation of prolonged stress against the background of breast cancer,
- 3. Justify and approve eco-psychological ways of the optimization of the adaptive mechanisms of a personality that make up a complementary resource in the treatment of this complex disease

Methods of the research

The following methods were applied as a particular clinical-psychological toolkit during

all the periods of the disease (detection of a tumour, establishment of the diagnosis, surgery, post-surgery period):

- *clinical interview* "Sickness Impact Profile" (De Bruin, Diederiks, De Witte, Stevens, & Philipsen, 1994) for the verification of the data and finding out about the personality dispositions of the participants of the research;
- *standardized methods* of measuring the personality identity, the level of aspirations; main personality features (Eysenck, Eysenck, & Barrett, 1985).

Alongside with standardized methods and methodologies the experiment has been conducted where in the experimental group *projective methods*, thematic associative drawings "Self-portrait", "Story in Pictures", Self Image (in Present and Future), free drawings, also the author's methodology "Drawing of Family in the Image of Flowers" were used (Лебедева, 2011; Lebedeva, 2012);

Qualitative and content analysis of the products of the creative activity is conducted in order to reveal the emotional reactions of women and their attitude towards the disease.

Deep dysregulatory, psycho-emotional, immuno-biological, endocrine and metabolic changes in the organism of cancer patients give arguments for the application of anamnestic, clinical psychopathological, clinical psychological and experimental psychological methods.

Sample of the research

The experimental group consists of the workers of education (pedagogues, psychologists, teachers, tutors, lecturers of universities, vocational schools, colleges, managers of educational institutions) in the situation of the oncology disease.

The control group consisted of the specialists of other socionomic professions also suffering from the oncology disease. They unlike the participants of the experimental group receive standard complex treatment without art-therapy.

The research is conducted on the base of the Regional Clinical Oncology Centre of Ulyanovsk (Russia).

Methodology of the research

Since the experience can be implemented in art images, the objective of art-therapy is the development of skills of the self-management of emotional states, the optimization of an emotional state and emotional background of activity (attraction, empathy, sympathy, compassion, "emotional tension"), enhancement of viability and stress tolerance, changing attitude towards oneself and one's problem. In case of oncology art-therapy can be attributed to complementary measures that facilitate the activation of internal psychoemotional and creative reserves of a personality.

Form of the applied art-therapy, frequency, peculiarities of the group

The author's eco-psychological model includes the form of long-term thematic group art-therapy, its duration for every patient is one year with the frequency of 8 sessions a month. Every session lasts from 60 to 90 minutes.

The shift of sessions takes place as follows: there are 16 sessions in two months under the supervision of an art-therapist, then during the following two months the forms of independent work (of the type of "group meetings") with the participation of volunteers take place. In total up to 48 sessions per calendar year are delivered under the guidance of an art-therapist.

Art-therapy group is heterogeneous according to age, severity of the disease, scope of surgical and specific treatment and includes both primary patients and patients with relapse.

According to a quantitative structure, a group includes 6-10 women with an established diagnosis.

The periods of art-therapy are consistent with the periods of the treatments of the main disease.

Pre-clinical (pre-surgery) period

The first art-therapy session is delivered after the establishment of a diagnosis and the appointment of surgical treatment to a patient in order to render psychological support to a woman in the situation of severe stress and psychoemotional preparation for the upcoming surgery.

Clinical period (treatment in the hospital)

Art-therapy is delivered in the hospital under the guidance of a professional art-therapist (4 sessions a month). On the first and the last session it is desirable to invite the attending breast surgeon who in an accessible form explains the pathogenesis of the disease, the risks, the strategies of medical treatment and psychoemotional rehabilitation and performs the functions of a co-therapist during the session.

Post-clinical period (rehabilitation activities). Systemic sessions under the guidance of an art-therapist alternate with the sessions of the type of "meeting groups" with the participation of volunteers and former patients who are in a state of stable remission and have a high level of life quality.

The atmosphere of emotional warmth, empathy, care and the trust that forms during the sessions allow the participants of the research to adequately perceive individual differences in the course of the disease and help each other.

It is expedient to use the form of internet consultations as individual work, render psychological assistance in the formation of self-regulation and stress tolerance skills.

In the structure of art-therapy sessions the following *stages* have been justified (Лебедева, 2011):

- 1. Stage of mindset. The use of art techniques meant for reducing control, manifestation of spontaneity, openness, creativity (15 minutes).
- 2. Stage of emergency art-therapy with the symptoms: pain and nausea against the background of medical treatment. Learning the art techniques of self-assistance. The present stage in the structure of the session is determined by the functional state of the patients (10-15 minutes).
- 3. Stage of individual artistic activity and other forms of creation (30 minutes).
- 4. Stage of reflection and feedback (30 minutes).
- 5. Stage of the transformation of artistic images with the emphasis on the search for a personality resource (15 minutes).

Temporal boundaries are indicated approximately.

The contents of art-therapy sessions contain the following topics for the artistic creation:

- 1. Groups of projective topics focused on the diagnostics and self-perception of emotional states.
- 2. Group of topics for emergency psychotherapeutic work with the symptoms of the disease and medical treatment (pain, nausea, fear of procedures).
- 3. Group of topics focused on psychical elaboration and reaction of psychotraumatic emotional states (agitation, anxiety, fear, frustration, resentment, anger, sadness, grief, aggression, feelings of helplessness and danger).
- 4. Group of topics focused on the correction of "Self image", optimization of the emotional state, plans and prospects of life.
- 5. Group of topics focused on the establishment and consolidation of the resource states: "Farewell with the Disease", the creation of the "Images of Health" and positive "Images of Future" as psychological resources.

The elaborated topics of art-therapy sessions comprise all forms of emotional manifestations:

- 1) emotional reactions that are the responsive experiences to the stimuli they have been caused by;
- 2) emotional states that are characterized by the change of neuropsychological tone;
- 3) emotional relations (feelings) that are characterized by emotional selectivity or the association of particular emotion with particular persons, objects or processes (according to Мясищев, 1960).

It is known that emotional tension and negative emotions are a strong irritant that suppresses the ability to adequately react in an actual situation, reduces self-esteem and leads to the infantilization of a personality (Карвасарски, 2006).

Process of art therapy

Art-therapy sessions in the period of complex treatment of an oncology disease, especially during clinical stage in the hospital, help to keep the patients occupied, weaken the concentration of attention on the manifestations of the disease and shift the focus from negative experiences to the side of aesthetical impressions. Moreover, the patients engaged in creative self-expression free from rational control and critical evaluation can manage their mood (create it) and control how they feel. Their emotional stability increases. Artistic activity not only distracts from pain and unpleasant feelings on the background of treatment procedures but also enhances the resilience of the organism, improves the indicators of the immune system, creates the motivation for the fastest recovery. Already Adrian Hill described the medical fact from his own experience that a creative enthusiasm activates the recovery, creates an expressed stable therapeutic effect (Hill, 1945).

To illustrate this, the detailed characteristics of the way of express-correction of emotional states developed by the author have been presented (Лебедева, 2011).

As it is known, the affects develop under the conditions when a subject cannot cope with the arisen situation. A complicated complex of experiences and images of a cancer patient about her disease, its causes and outcome ("internal image of disease", according to Luria (1987) is the basis on which neurotic reactions, reactive states, pathological scenarios of personality development can occur and develop. Well-timed art-therapy facilitates the optimization of compensatory reactions and emotional adjustment. It is the creative work with visual materials that helps to release the "destructive" negative emotions and feelings. According to the theory of Hill (1940), by encouraging a patient to express his/her experiences in a visual form it is possible to "heal" his/her internal wounds related to introspection. For example, in case of "symbolic destruction of obsessions" they create a picture of an obsessive image and then they destroy the picture (Коган, 2002). There are cases of solving the inner conflict with the help of a metaphoric picture. Thus, in the structure of the methodology of a "dynamic synthetic picture" an internal problem is expressed in the image of a tree with a subsequent destruction or change of the image of a tree in the imagination; it can be a one-time procedure or it can be included into the structure of the course of therapy, there can also be variants with the inclusion of suggestion after the first picture and drawing another picture after it (Панов, 2004). Consequently, a free expression of spontaneous experiences in a non-verbal semiotic field opens new opportunities that complement verbal forms of psychotherapy and psychocorrection.

In art-therapy practice the art technique "Aquatypia" and other various forms of the "play with the paints" are widely applied. The artistic product that is obtained by that is further used for the discussion and feedback with a patient.

The specifics of art-therapy for cancer patients is in the necessity to render the express-correction of an actual state and during one session help a woman to react, weaken or overcome strong negative experiences in a socially accepted way, get an emotional discharge, obtain a subjective experience of rapid self-assistance. The maximum comfortable conditions with a high level of psychological protection are established since emotionally traumatized people require an especially caring and tactical approach.

Another particularity is that every art-session with cancer patients ends with the creation of an artistic image with positive resourceful contents. Its visualization and verbalization facilitate self-reflection and making a conscious solution, which becomes a trigger for the improvement of general psychological wellbeing, and in a long-term perspective ensures the positive dynamics of emotional adjustment.

Analysis of the data of the research

The use of imagination and non-verbal means gives a client an alternative way of self-examination and self-healing. The sessions of drawing or other kinds of creation supported and encouraged by a psychotherapist can fill a patient's life with content and meaning and distract him/her from painful experiences.

According to Rogers (Rogers & Sanford, 1989), this process is a powerful integrating

force. "... Experiences can be constructively channeled into creative sessions ... of art" (Rogers & Sanford, 1989) The analysis of the data of the interview has shown that an inseparable part of the experiences of female cancer patients is fear that is clearly expressed in all periods of the disease: detection of a tumour, establishment of the diagnosis, surgery; fear for future (lifespan, stability of family relations, social demand, etc.). For example, among the patients' statements there are assertions that the disease is the result of the external influence: "evil eye", slander, envy, revenge. Sometimes the patients viewed the causes of the disease as fate, destiny, heredity, "judgment", "punishment", etc. Therefore, an important role in psychocorrection of an emotional state of cancer patients is played by art-therapeutic work with attitudes and personal legends.

Professional activity in the education system enhances the feeling of isolation, because in the pedagogical staff it is not accepted to openly discuss personal topics, all the more so the topic of the oncology disease. According to the data of the research (Test for Self-assessment of the emotional state of Wessman and Ricks (2004) and the Spielberger anxiety test in the adaptation of Ханин (Сборник психологических тестов, 2005), the isolation that occurs among patients is especially evident in personality sphere (up to 80% of women hide the diagnosis).

The results obtained in the process of art therapy that confirm positive dynamics of emotional adjustment of the participants of the project are validated with objective and reliable quantitative data of a biochemical examination.

The results of biochemical samples of 30 breast cancer patients after complex treatment with 1-3 B stages of the disease and of the age of 38-67 years have been presented. The experimental group (10 persons) consisted of women who after the special treatment had the course of restorative art-therapy delivered according to the abovementioned scheme. In the control group (20 persons) standard treatment was carried out.

The obtained data clearly demonstrate a reliable decrease of the level of antioxidant (AO) ferments in blood plasma among the patients in the research group in comparison with the control group, namely: the indicators of MDA (malondialdehyde) have been reduced by 6%, GR (glutathione reductase) by 22%, catalase by 60%. It shows the decrease of free-radical reactions in the organism and allows making a precondition that the risk of the relapse of the disease in the present group of patients remains low (Table 1).

Table 1. Comparison of the experimental and control groups according to biochemical indicators

Biochemical indicators	Experimental group (N=10)	Control group (N=20)
MDA mmol/L	1,93 ± 0,096*	$2,049 \pm 0,17*$
GR mol/L*min	0.011 ± 0.001 *	0,014 ± 0,001*
Catalase mmol/L*min	0,049 ± 0,006*	0,12 ± 0,008*

Note: statistical significance of the indicator *p<0,05

It is known that a high level of cortisol and prolactin in blood correlates with psychoemotional tension of the organism, and prolonged stress can provoke the relapse and progressing of breast cancer (Туркевич, 1982).

The results of the present research confirm an evident decrease of the level of cortisol by 2,24 times and the decrease of the level of prolactin in blood serum by 13,46% in the research group in comparison with the control group (Table 2).

Indicators of the level of hormones

Prolactin (mIU/L)

Experimental group N=10

Control group N=20 $362,95 \pm 32,17*$ $211,78 \pm 25,81*$

475,35 ± 43,28*

 $419,36 \pm 45,54*$

Table 2. Comparison of the experimental and control groups according to the indicators of hormones

Note: statistical significance of the indicator *p<0,05

Cortisol (nmol/L)

The most evident result is the dynamics of the level of cytokines (IFN – interferon and IL – interleukin) in the process of the treatment of breast cancer.

Cytokines (regulatory proteins) stimulate and inhibit the growth of cells, determine their differentiation and functional activity. One of the main functions of cytokines is the ensuring of the coordinated activity of the immune, endocrine and nervous systems as a response to stress. The increased production of cytokines lies on the basis of many diseases. There is an evidentiary presumption that cytokine dysregulation is on the basis of tumour growth.

According to the results of the measurements of the levels of cytokines in the blood serum of cancer patients in the present project, it has been found that the level of IFN- γ in the experimental group is lower in comparison with the control group (Table 3).

Table 3. Comparison of the experimental and control groups according to the indicators of cytokines

Indicators of cytokines, proteins that coordinate immune reactions	Experimental group N=10	Control group N=20
IFN-γ (interferon)	11 10	62,39 ± 2,27*
IL-1β (interleukin)	23,92 ± 1,30*	8,92 ± 0,23*

Note: statistical significance of the indicator *p<0,05

Conclusions

Swift incidence rate of breast cancer among Russian women actualizes the problem of innovative research methods of not only special but eco-psychological restorative treatment with the purpose of assessment and improvement of quality of life and its optimization and longevity. Comprehensive analysis of socially meaningful yet little-studied problem permitted to work out the model of emotional adaptation for cancer patients in the process of restorative art-therapy. A successful model for a long-term group based restorative art therapy has been developed. The program can be incorporated in the process of overall clinical therapy for patients with breast cancer during all phases of therapy, i.e. pre-clinical, clinical, and post-clinical and during the period of rehabilitation. The structure and content of art therapy session must be customized individually for specific oncology related condition or disease.

In the structure of art therapy sessions justified 5 stages, including the stage of emergency psychotherapeutic work with emotional states and the symptoms that accompany the patients after surgery, during chemotherapy, radiation therapy and other forms of medical treatment.

In general, it is proved that the artistic activity in the process of art therapy is not only a distraction from the pain and emotions caused by the diagnosis, but also enhances the emotional stability, creates motivation to recovery. In 30 women of the study group according to biochemical blood test recorded decline of free radical reactions in the body, improved the immune, endocrine and nervous systems.

So, timely conducted art therapy helps optimize compensatory reactions and emotional adjustment of cancer patients, has a positive effect on the quality of life of patients and improves the overall outlook for their recovery.

In the process of the research, development and testing of this study, as well as patented conservative surgical involvement with consideration of minimal damage for breast cancer

patient, has resulted in emotional adaptation and physical rehabilitation with steady positive dynamics.

Studied the clinical and epidemiological aspects of breast cancer as an example the prevalence of the disease in the Ulyanovsk region.

In the long term, the theoretical results can promote developing of psycho-oncology, general and overall health psychology, eco-psychology, and worked out art-therapy programmers will be in high demand in the applications of practical activity of specialists in the conditions of oncology clinics and centers.

References

- 1. Clarke, D. E. (1995). Vulnerability to stress as a function of age, sex, locus of control, hardiness and type A personality. *Social Behavior and Personality: An international journal, 23 (3), 285-286.*
- 2. De Bruin, A., Diederiks, J., De Witte, L., Stevens, F., & Philipsen, H. (1994). The Development of Short Generic Version of the Sickness Impact Profile. *Journal of Clinical Epidemiology*, 47, (4), 407-418.
- 3. Eysenck, S. B. G., Eysenck, H. J., & Barrett, P. (1985). A revised version of the Psychoticism scale. *Personality and Individual Differences*. 6, 21-29
- 4. Hill, A. (1945). Art Versus Illness. London: G. Allen and Unwin.
- 5. Human Development Index. (2008). GLOBOCAN. v2. World Bank UNDB. Retrieved from: http://visual.ly/cancers-global-footprint?view=true.
- 6. Lebedeva, L. (2012). Animated treatment: the method of art therapy used with children having communication problems. *Social Welfare Interdisciplinary Approach 2 (1)*, 123-130.
- 7. Luria, A.R. (1987). The Mind of a Mnemonist: A Little Book About A Vast Memory. Harvard University Press.
- 8. Rogers, C.R., & Sanford R.C. (1989). Client-Centered Psychotherapy. In H. I. Kaplan & B. J. Sadock (Ed.) *Comprehensive Textbook of Psychiatry*. Baltimore: Williams and Wilkins
- 9. Spiegel, D., Bloom, J., Kraemer, H., & Gottheil, E. (1989). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *The Lancet*, 2, 888-91.
- 10. Walsh, S. M., Martin,,S. C., & Schmidt, L. (2004). Testing the efficacy of a creative-arts intervention with family caregivers of patients with cancer. *A.Journal of nursing scholarship*, 36 (3), 214-219.
- 11. Аболин, Л. М. (1987). *Психологические механизмы эмоциональной устойчивости человека*. Казань.
- 12. Аллан, Дж. (1997). Ландшафт детской души. Диалог.
- 13. Баева, И.А. (2002). Тренинги психологической безопасности в школе. Санкт-Петербург:
- 14. Божович, Л.И. (1966). *Возрастные закономерности формирования личности ребенка*. Автореф. дис. д-ра пед. наук (по психологии). Москва.
- 15. Василюк, Ф. Е. (1984). Психология переживания. Москва: МГУ.
- 16. Гнездилов, А. В. (2002). Психология и психотерапия потерь. Санкт-Петербург: Речь
- 17. Гудман, Р., & Скотт, С. (2008). Детская психиатрия. 2-е изд. Триада-Х.
- 18. Данилова, Н.Н. (1998). Психофизиология: Уч. издание. Москва: Аспект пресс.
- 19. Дьяченко, М. И., & Пономаренко, В. А. (1990). О подходах к изучению эмоциональной устойчивости. *Вопросы психологии*, *1*, 106–112.
- 20. Захаров, А.И. (1995). Как помочь нашим детям избавиться от страха. Санкт-Петербург: Гиппократ.
- 21. Карвасарски, Д. Б. (Ред.) (2006). Психотерапевтическая энциклопедия. 3-е изд. Санкт-Петербург: Питер.
- 22. Кюблер-Росс, Э. (2001). О смерти и умирании. К.: "София".
- 23. Коган, E. (2002). Игра и страсть в русском изобразительном искусстве. *Новый Журнал*, 277. Retrieved from: http://magazines.russ.ru/nj/2002/227/kogan-pr.html
- 24. Лебедева, Л.Д. (2011). Способ экспресс-коррекции эмоционального состояния. Патент на изобретение РФ. № 2420233. «Изобретения. Полезные модели» Официальный Бюллетень Федеральной службы по интеллектуальной собственности, патентам и товарным знакам, 16.
- 5. Меерсон, Ф.З. (1981). Адаптация, стресс и профилактика. Москва: Наука.
- 26. Мясищев, В. Н. (1960). Личность и неврозы. Ленинград: Ленинградского университета.

- 27. Панов, В.И. (2001). К проблеме психолого-педагогического проектирования и экспертизы образовательного учреждения. *Психологическая наука и образование*, 2, 14-20.
- 28. Панов, В.И. (2004). Экологическая психология: Опыт построения методологии. Москва: Наука, 2004.
- 29. Основные подходы и методы психотерапии (2005). *Московский психологический журнал*, 12. Retrieved from: http://magazine.mospsy.ru/nomer12/s07.shtml
- 30. Сборник психологических тестов. Часть І: Пособие (2005). Мн.: Женский институт ЭНВИЛА.
- 31. Семке, В. Я. (2003). Психотерапия в Сибири: взгляд из прошлого в будущее. Бюллетень Сибирской медицины, 2 (3), 18-24.
- 32. Уэссман, А., & Рикс, Д. (2004). Методика самооценки эмоциональных состояний. В В. А. Сонин (ред.) *Психодиагностическое познание профессиональной деятельности*, с. 94-96. Санкт-Петербург.
- 33. Туркевич, С. (Ред.) (1982). Нейроэндокринная система и экспериментальный рак молочной железы. Киев: Наук. думка

THE EMOTIONAL ADJUSTMENT IN THE PROCESS OF RESTORATIVE ART-THERAPY: THE EXPERIENCE OF INTERDISCIPLINARY RESEARCH

Summary

Liudmila D. Lebedeva Institute of Positive Technologies and Consulting, Moscow, Russia

Swift incidence rate of breast cancer among Russian women actualizes the problem of innovative research methods of not only special but eco-psychological restorative treatment with the purpose of assessment and improvement of quality of life and its optimization and longevity. Comprehensive analysis of socially meaningful yet little-studied problem permitted to work out the model of emotional adaptation for cancer patients in the process of restorative art-therapy. Scientific novelty of the material includes the evidence of influence of art therapy on emotional adjustment of cancer patients. The reliability of laboratory-confirmed levels of oxidative stress and cytokines (regulatory proteins) as a prognostic indicator in the assessment of neuroendocrine cancer patients. Each art session with cancer patients is completed with the creation of an artistic image with positive resource content. Its visualisation and verbalisation promote self-reflection and taking determined decisions, which is a trigger to improve the overall psychological well-being, and in the long term provide positive dynamics of emotional adjustment. Object of the research. The process of the emotional adjustment of women with the oncology disease in the process of restorative art-therapy. Aim and objectives. In accordance with the posed problem it is aimed to: 1. Find out the eco-psychological mechanisms of the influence of restorative art therapy on objective indicators – the state of the homeostasis of the organism, emotional stability and life quality of the patients who constantly experience, due to the specifics of their professional activity, emotional influence of the conditions of the "extreme surroundings". 2. Specify and complement the images of the emotional stability of a personality in the situation of prolonged stress on the background of breast cancer; 3. Justify and approve eco-psychological ways of the optimization of the adaptive mechanisms of a personality that make up a complementary resource in the treatment of this complex disease. Methods of the research. Clinical interview with women; "Sickness Impact Profile" for the verification of the data and finding out about the personality dispositions of the participants of the research; standardized methods of measuring the personality identity, the level of aspirations; main personality features (according to Eysenck, Eysenck, & Barrett, 1985); wide spectrum of personality traits. Alongside with standardized methods and methodologies the experiment has been conducted where in the experimental group projective methods, thematic associative drawings "Self-portrait", "Story in Pictures", Self Image (in Present and Future), free drawings, also the author's methodology "Drawing of Family in the Image of Flowers" were used (Лебедева, 2011);

A successful model for a long-term group based restorative art therapy has been developed. The program can be incorporated in the process of overall clinical therapy for patients with breast cancer during all phases of therapy, i.e. pre-clinical, clinical, and post-clinical and during the period of rehabilitation. The structure and content of art therapy session must be customized individually for specific oncology related condition or disease.

In the structure of art therapy sessions justified 5 stages, including the stage of emergency psychotherapeutic work with emotional states and the symptoms that accompany the patients after surgery, during chemotherapy, radiation therapy and other forms of medical treatment.

It is proved that the artistic activity in the process of art therapy is not only a distraction from the pain and emotions caused by the diagnosis, but also enhances the emotional stability, creates motivation to recovery. In 30 women of the study group according to biochemical blood test recorded decline of free radical reactions in the body, improved the immune, endocrine and nervous systems.

So, timely conducted art therapy helps optimize compensatory reactions and emotional adjustment of cancer patients, has a positive effect on the quality of life of patients and improves the overall outlook for their recovery.

In the process of the research, development and testing of this study, as well as patented conservative surgical involvement with consideration of minimal damage for breast cancer patient, has resulted in emotional adaptation and physical rehabilitation with steady positive dynamics. Studied the clinical and epidemiological aspects of breast cancer as an example the prevalence of the disease in the Ulyanovsk region.