

Zlobin O. O. Psychotherapeutic support for persons with vascular dementia suffering from non-cognitive psychopathological symptoms of non-psychotic level. *Journal of Education, Health and Sport*. 2020;10(3):98-107. eISSN 2391-8306. DOI <http://dx.doi.org/10.12775/JEHS.2020.10.03.009> <https://apcz.umk.pl/czasopisma/index.php/JEHS/article/view/JEHS.2020.10.03.009> <https://zenodo.org/record/3724826>

The journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. § 8.2) and § 12.1.2) 22.02.2019.
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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 09.03.2020. Revised: 18.03.2020. Accepted: 23.03.2020.

PSYCHOTHERAPEUTIC SUPPORT FOR PERSONS WITH VASCULAR DEMENTIA SUFFERING FROM NON-COGNITIVE PSYCHOPATHOLOGICAL SYMPTOMS OF NON-PSYCHOTIC LEVEL

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Abstract

Introduction. In addition to cognitive deficit, the presence of a dementing process of vascular origin leads to changes in the patient's personality, as well as in his character. Persons with vascular dementia always have non-cognitive disease manifestations of non-psychotic level. Non-psychotic psychopathological symptoms can lead to a significant deterioration of the well-being and quality of life of patients with vascular dementia, and therefore should be taken into account when drawing up a plan for treatment and rehabilitation of such patients. Psychotherapy interventions play the most important role in management of patients with vascular dementia. **The aim** of the study: to develop a targeted model of psychotherapeutic support based on the selective correction of non-cognitive psychopathological symptoms of non-psychotic level in patients with vascular dementia. **Materials and methods:** The study was carried out on 80 patients with vascular dementia with different localization of the lesion. The average age of the patients was 68.6 years. All persons included in the contingent of the study demonstrated non-cognitive psychopathological symptoms of non-psychotic level. **Results.** Recommendations for psychocorrection of maladaptive non-cognitive pathopsychological symptomatology of non-psychotic level in persons with vascular dementia have been developed. For each of these

symptoms, congruent vectors, mechanisms, and methods of psychotherapeutic correction were identified and described. The basic vector for minimizing and eliminating *depression* in patients with vascular dementia aimed at shifting the mode of emotional experiences from the negative spectrum to the positive or at least neutral. The basic vector for minimizing and eliminating *anxiety* in patients with vascular dementia aimed at shifting attention from stressful factors to sanogenic, emotionally neutral stimuli. The basic vector for minimizing and eliminating *apathy* in patients with vascular dementia aimed at activation of mental processes and restoration of a minimum acceptable level of emotional response. The basic vector for minimizing and eliminating *irritability* in patients with vascular dementia aimed at increasing the threshold of negative emotional response to environmental stimuli. The basic vector for minimizing and eliminating *emotion incontinence* in patients with vascular dementia aimed at restoring the ability to control external manifestations of internal feelings.

Key words: vascular dementia; psychotherapy; affective symptoms; rehabilitation; geriatric psychiatry.

Vascular dementia is one of the most common diseases leading to a decrease in cognition of different levels in both Ukraine and the world [1]. At the same time, due to the steady growth of cardiovascular pathology, as well as to the tendency for the population to grow older, the number of people affected by vascular dementia also has a continuous positive increase [2].

In addition to cognitive deficit, the presence of a dementing process of vascular origin leads to changes in the patient's personality, as well as in his character [3]. Persons with vascular dementia have the following non-cognitive disease manifestations of non-psychotic level: depression, anxiety, emotional lability, dysphoria, apathy, decrease in motivation up to abulia, aggression, agitation, asthenia, sleep disturbances [4, 5]. These psychopathological symptoms – with different frequency and severity – are found in all the patients with impaired cerebral circulation [6].

Non-psychotic psychopathological symptoms can lead to a significant deterioration of the well-being and quality of life of patients with vascular dementia, and therefore should be taken into account when drawing up a plan for treatment and rehabilitation of such patients [7]. However, an adequate administration of psychotropic drugs for this group of patients is extremely challenging due to a poor tolerability for such drugs as well as a high frequency of adverse reactions due to the damage of both brain tissue and vessels. That is why psychotherapy interventions play the most important role in management of patients with

vascular dementia [8]. Nevertheless, psychotherapeutic strategies aimed at the selective correction of non-cognitive psychopathological symptoms of non-psychotic level have not yet been developed.

The objective: to develop a targeted model of psychotherapeutic support based on the selective correction of non-cognitive psychopathological symptoms of non-psychotic level in patients with vascular dementia.

Contingents and methods. The study was carried out on 80 patients with vascular dementia with different localization of the lesion. The average age of the patients was $68.6 \pm 1,3$ years. All persons included in the contingent of the study demonstrated non-cognitive psychopathological symptoms of non-psychotic level. Prevalence and severity of psychopathological symptoms were assessed clinically and measured using congruent subscale of the Neuropsychiatric Inventory (NPI) before the start of the treatment and after conducting 6 months lasting symptom-targeted psychotherapy.

Results. For the implementation of treatment and rehabilitation of patients with vascular dementia within the modern model of personalized medicine, it is necessary to carry out highly congruent psychotherapeutic interventions aimed at correction of specific non-cognitive psychopathological symptoms of non-psychotic level, which serve as factors of maladaptation and can end up in significant decrease of the well-being.

Recommendations for the implementation of vectors, mechanisms, and methods of psychotherapeutic correction have been developed for the most common non-cognitive psychopathological symptoms of non-psychotic level in patients with vascular dementia, which lead to a significant deterioration in the quality of life in this contingent. Such symptoms are: anxiety, depression, incontinence of emotions, irritability, and apathy.

Anxiety

Before psychotherapeutic interventions, anxiety was diagnosed by clinical observation in 26% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 7 points mean.

The basic vector for minimizing and eliminating anxiety in patients with vascular dementia aimed at shifting attention from stressful factors to sanogenic, emotionally neutral stimuli.

The main mechanisms of anxiety correction in patients with vascular dementia: teaching rational reassessment of one's emotional state, organization of patient's time by drawing up a daily schedule.

Methods and techniques of psychotherapy that should be used in case of moderate to severe anxiety: applied relaxation, supportive psychotherapy, rational psychotherapy, rational emotive behavior therapy, client-centered psychotherapy, art-therapy, pet-therapy, core conflictual relationship theme, self-instruction method, systematic desensitization.

After 6 months of psychotherapeutic interventions, anxiety was diagnosed by clinical observation in 18% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 4 points mean. A decrease in scores of anxiety NPI subscale during the 6-month symptom-targeted psychotherapy is reflected at figure 1.

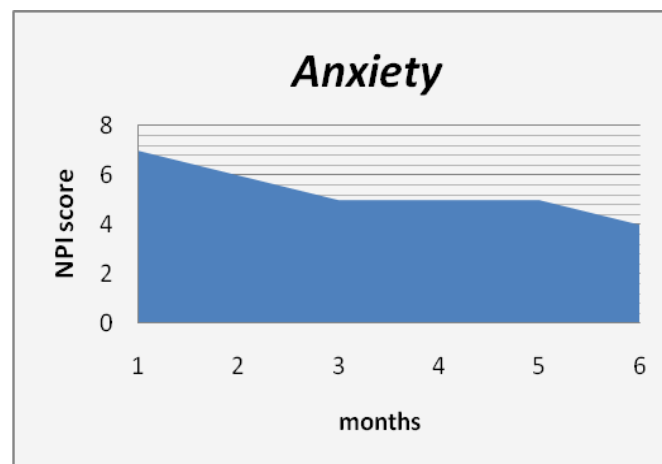


Figure 1

Depression

Before psychotherapeutic interventions, depression was diagnosed by clinical observation in 34% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 8 points mean.

The basic vector for minimizing and eliminating depression in patients with vascular dementia aimed at shifting the mode of emotional experiences from the negative spectrum to the positive or at least neutral.

The main mechanisms of depression correction in patients with vascular dementia: carrying out desensitization of low-mood provoking factors, involvement of the patient in active pastime and social interactions.

Methods and techniques of psychotherapy that should be applied in case of moderate to severe depression: positive psychotherapy, supportive psychotherapy, emotionally focused therapy, process-oriented psychotherapy, recovered-memory therapy, biopsychotherapy, sociodrama, sanogenic thinking, logotherapy, poetry therapy, music therapy.

After 6 months of psychotherapeutic interventions, depression was diagnosed by clinical observation in 18% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 4 points mean. A decrease in scores of depression NPI subscale during the 6-month symptom-targeted psychotherapy is reflected at figure 2.

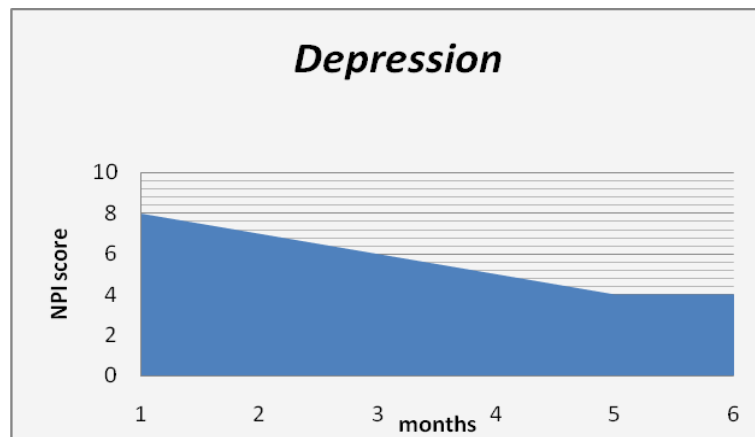


Figure 2

Apathy

Before psychotherapeutic interventions, apathy was diagnosed by clinical observation in 49% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 9 points mean.

The basic vector for minimizing and eliminating apathy in patients with vascular dementia aimed at activation of mental processes and restoration of a minimum acceptable level of emotional response.

The main mechanisms of apathy correction in patients with vascular dementia: increasing the tone of the central nervous system, awakening curiosity for interpersonal interactions.

Methods and techniques of psychotherapy that should be used in case of moderate to severe apathy: biopsychotherapy, emotional-stress therapy, emotionally focused therapy, rational emotive behavior therapy, social therapy, dance movement therapy, bibliotherapy, logotherapy, positive psychotherapy, self-instruction method, individual psychotherapy.

After 6 months of psychotherapeutic interventions, apathy was diagnosed by clinical observation in 45% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 7 points mean. A decrease in scores of apathy NPI subscale during the 6-month symptom-targeted psychotherapy is reflected at figure 3.

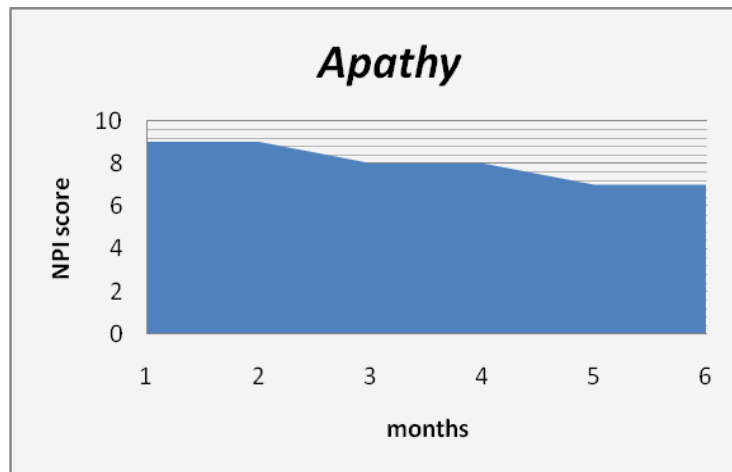


Figure 3

Emotion incontinence

Before psychotherapeutic interventions, emotion incontinence was diagnosed by clinical observation in 47% of patients. The severity of this symptom was estimated clinically as such of high severity.

The basic vector for minimizing and eliminating emotion incontinence in patients with vascular dementia aimed at restoring the ability to control external manifestations of internal feelings.

The main mechanisms of emotional incontinence correction in patients with vascular dementia: reduction of the general excitability level, increasing of the self-awareness level, development of self-control skills.

Methods and techniques of psychotherapy that should be used in case of moderate to severe incontinence of emotions: positive psychotherapy, sanogenic thinking, rational emotive behavior therapy, emotionally focused therapy, social therapy, process-oriented psychotherapy, biopsychotherapy, pet-therapy, art therapy, writing therapy, dance movement therapy.

After 6 months of psychotherapeutic interventions, emotion incontinence was diagnosed by clinical observation in 43% of patients. The severity of this symptom was estimated clinically as such of medium severity. A decrease in level of clinical expression of emotion incontinence during the 6-month symptom-targeted psychotherapy is reflected at figure 4.

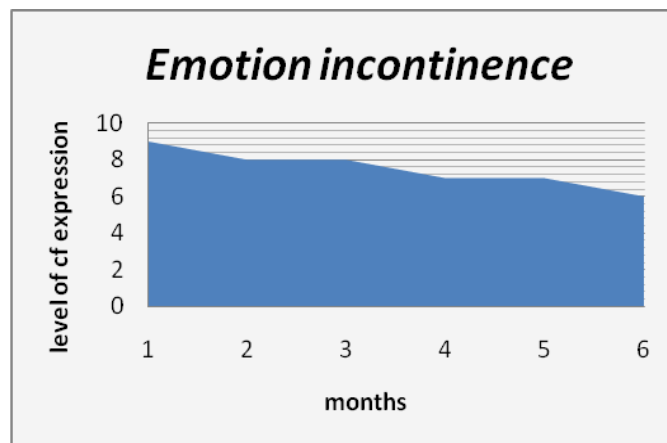


Figure 4

Irritability

Before psychotherapeutic interventions, irritability was diagnosed by clinical observation in 28% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 8 points mean.

The basic vector for minimizing and eliminating irritability in patients with vascular dementia aimed at increasing the threshold of negative emotional response to environmental stimuli.

The main mechanisms of irritability correction in patients with vascular dementia: normalization of excitation and inhibition processes in the central nervous system, teaching such persons how to use the relaxation techniques, maximizing exclusion of the provoking factors from the patient's environment.

Methods and techniques of psychotherapy that should be used in case of moderate to severe irritability: behavioral psychotherapy, core conflictual relationship theme, applied relaxation, rational emotive behavior therapy, emotionally focused therapy, landscaping, rational psychotherapy, music therapy, writing therapy, bibliotherapy.

After 6 months of psychotherapeutic interventions, irritability was diagnosed by clinical observation in 20% of patients. The severity of this symptom on the corresponding NPI subscale was estimated at 5 points mean. A decrease in scores of irritability NPI subscale during the 6-month symptom-targeted psychotherapy is reflected at figure 5.

Non-cognitive psychopathological symptoms of non-psychotic level in patients with vascular dementia and their congruent vectors, mechanisms, and methods of psychotherapeutic correction were systemized in table 1.

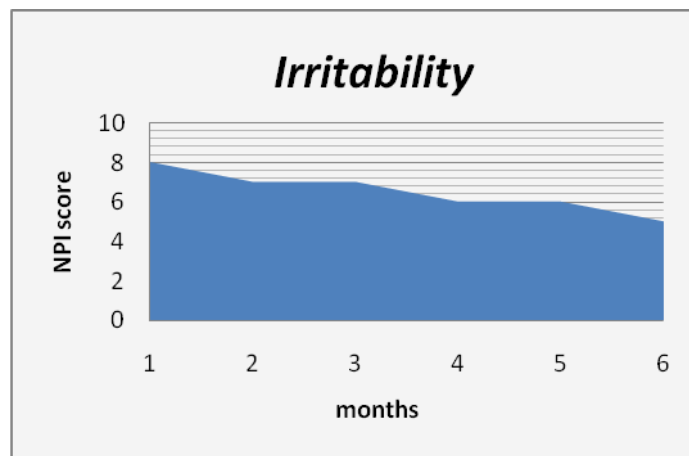


Figure 5

Table 1.

Psychocorrection of non-cognitive psychopathological symptoms of non-psychotic level

symptom	The basic vector for minimizing the symptom	The main mechanisms of correction	Methods and techniques of psychotherapy
1	2	3	4
anxiety	shifting attention from stressful factors to sanogenic, emotionally neutral stimuli	teaching rational reassessment of one's emotional state, organization of patient's time by drawing up a daily schedule	applied relaxation, supportive psychotherapy, rational psychotherapy, rational emotive behavior therapy, client-centered psychotherapy, art-therapy, pet-therapy, core conflictual relationship theme, self-instruction method, systematic desensitization.
depression	shifting the mode of emotional experiences from the negative spectrum to the positive or at least neutral	carrying out desensitization of low-mood provoking factors, involvement of the patient in active pastime and social interactions	positive psychotherapy, supportive psychotherapy, emotionally focused therapy, process-oriented psychotherapy, recovered-memory therapy, biopsychotherapy, sociodrama, sanogenic thinking, logotherapy, poetry therapy, music therapy
apathy	activation of mental processes and restoration of a minimum acceptable level of emotional response	correction in patients with vascular dementia: increasing the tone of the central nervous system, awakening curiosity for interpersonal interactions	biopsychotherapy, emotional-stress therapy, emotionally focused therapy, rational emotive behavior therapy, social therapy, dance movement therapy, bibliotherapy, logotherapy, positive psychotherapy, self-instruction method, individual psychotherapy

1	2	3	4
incontinence of emotions	restoring the ability to control external manifestations of internal feelings	reduction of the general excitability level, increasing of the self-awareness level, development of self-control skills	positive psychotherapy, sanogenic thinking, rational emotive behavior therapy, emotionally focused therapy, social therapy, process-oriented psychotherapy, biopsychotherapy, pet-therapy, art therapy, writing therapy, dance movement therapy
irritability	increasing the threshold of negative emotional response to environmental stimuli.	:normalization of excitation and inhibition processes in the central nervous system, teaching such persons how to use the relaxation techniques, maximizing exclusion of the provoking factors from the patient's environment	behavioral psychotherapy, core conflictual relationship theme, applied relaxation, rational emotive behavior therapy, emotionally focused therapy, landscaping, rational psychotherapy, music therapy, writing therapy, bibliotherapy

Conclusions: Recommendations for psychocorrection of maladaptive non-cognitive pathopsychological symptomatology of non-psychotic level in persons with vascular dementia have been developed. For each of these symptoms, congruent vectors, mechanisms, and methods of psychotherapeutic correction were identified and described.

Psychopathological symptoms such as anxiety, depression, and irritability have been found to be amenable to psychotherapeutic correction better than apathy and emotion incontinence.

The basic vector for minimizing and eliminating depression in patients with vascular dementia aimed at shifting the mode of emotional experiences from the negative spectrum to the positive or at least neutral.

The basic vector for minimizing and eliminating anxiety in patients with vascular dementia aimed at shifting attention from stressful factors to sanogenic, emotionally neutral stimuli.

The basic vector for minimizing and eliminating apathy in patients with vascular dementia aimed at activation of mental processes and restoration of a minimum acceptable level of emotional response.

The basic vector for minimizing and eliminating irritability in patients with vascular dementia aimed at increasing the threshold of negative emotional response to environmental stimuli.

The basic vector for minimizing and eliminating emotion incontinence in patients with vascular dementia aimed at restoring the ability to control external manifestations of internal feelings.

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