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EFFECTIVENESS OF PSYCHOTHERAPEUTIC STRATEGIES IN REDUCING ANXIETY AND DEPRESSIVE SYMPTOMS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Abstract: *This study aimed to determine the effectiveness of psychotherapeutic intervention in reducing depression and anxiety in patients with rheumatoid arthritis. During the study, the psychoemotional state of the patients, the level of disease activity and quality of life indicators were studied based on the standard psychodiagnostic scales HADS and SF-36.*

The results showed that a significant proportion of patients with rheumatoid arthritis have clinical and subclinical anxiety and depressive disorders. Psychoemotional disorders are explained by the intensity of pain in patients, partial or complete limitation of physical activity, social isolation and an abundance of irrational thoughts. The presence of such complaints has a significant impact on quality of life indicators. In patients who received psychotherapeutic intervention, especially cognitive-behavioral therapy, a significant decrease in anxiety and depression, a decrease in pain perception and a positive change in quality of life indicators were observed. In the group that received rational psychotherapy, it was found that the dynamics were low .

Keywords: *rheumatoid arthritis, depression, anxiety, quality of life, psychotherapy, cognitive-behavioral therapy, rational psychotherapy, HADS, SF-36.*

Introduction: Rheumatoid arthritis (RA) is a chronic disease of autoimmune etiology, accompanied by a systemic inflammatory process, which leads to joint destruction, pain syndrome and functional limitation. Modern literature notes that RA has a significant impact not only on somatic consequences, but also on mental health. As a result of prolonged pain, physical limitation, risk of disability and chronic course of the disease, patients often develop anxiety and depressive disorders .

Various sources indicate that the frequency of depressive syndrome in patients with RA is 30–60%, and anxiety disorders are 25–40%. These figures confirm the need to study RA not only as a rheumatological disease, but also as a biopsychosocial problem .

Clinical structure of psychoemotional disorders Psychoemotional disorders in RA are manifested in the following main forms: **Depressive syndrome** - depressed mood, apathy, feelings of hopelessness, dissatisfaction with the quality of life, pessimistic views on the future. **Anxiety syndrome** - constant anxiety, social isolation, fear for one's own health, constant worry about worsening of the disease. **Mixed disorders** - a combination of symptoms of depression and anxiety.

Psychopathological analyses show that depression and anxiety in RA are often formed in combination with somatogenic factors (persistent pain, insomnia, limitation of physical activity), personal psychodynamic characteristics, and maladaptive cognitive schemas .

Mental disorders, especially depression, are often overlooked and undertreated in RA patients. This is explained by the fact that doctors often focus on the physical aspects of the disease. Depression and anxiety are considered a normal response of the body to a chronic disease. The diagnosis of psychoemotional disorders is somewhat more complicated, as they manifest themselves in symptoms similar to those of RA (chronic fatigue, movement restrictions, weight loss, loss of appetite, insomnia,

decreased work capacity). Studies have shown that increased pain often occurs as a result of a depressive state, which can be misinterpreted as an inflammatory consequence of the disease. In addition, the detection of psychoemotional disorders is limited by the individual treatment approach among rheumatologists and the lack of information about the mental state

Research objective: To determine the effect of psychotherapy methods on reducing depression and anxiety in patients with rheumatoid arthritis and to assess the effectiveness of psychotherapeutic approaches in improving quality of life.

Materials and methods: The study was conducted to evaluate the effectiveness of psychotherapeutic intervention in reducing depression and anxiety in patients diagnosed with rheumatoid arthritis. A total of 105 patients with rheumatoid arthritis were recruited for the study. Patients were included in the study if their diagnosis was confirmed according to the results of clinical, laboratory and instrumental examinations.

Patients were divided into two groups depending on the type of psychotherapeutic approach used: **Group I (n=54)** - patients who underwent cognitive-behavioral therapy (CBT) on the background of standard pharmacotherapy; **Group II (n=51)** - patients who received rational psychotherapy in addition to standard treatment.

The Hospital Anxiety and Depression Scale (HADS) was used to assess psychoemotional status. On this scale, scores of 0–7 indicate normal, scores of 8–10 indicate subclinical, and scores of 11 or higher indicate clinical anxiety or depression.

Patients' quality of life **SF-36 (Short Form Health Survey)** was assessed based on a questionnaire. This questionnaire covers eight main components of quality of life: physical activity (PF), physical role functioning (RP), pain intensity (BP), general health (GH), vital energy (VT), social activity (SF), emotional role functioning (RE), and mental health (MH). The results are evaluated on a scale from 0 to 100 points, with higher scores indicating better quality of life.

Were performed before the start of treatment, at 3-month and 6-month follow-up periods. The results were expressed as absolute numbers (n), percentages (%), and mean \pm standard deviation ($M \pm SD$). The reliability of the differences between groups and the changes observed over time was assessed using statistical methods, and $p < 0.05$ was considered significant. The value was considered statistically significant.

Results and discussion: The study showed that psychoemotional state and quality of life indicators are closely related in patients with rheumatoid arthritis. At the beginning of the study, most patients had varying degrees of anxiety and depression symptoms, which was explained by the chronic course of the disease, pain syndrome, and physical activity limitation. The results of the HADS scale confirmed the prevalence of clinical and subclinical psychoemotional disorders among rheumatoid arthritis patients.

The results were analyzed in groups I and II. In **group I**, subclinical anxiety was noted in 22.2% (12 patients), and clinical anxiety was noted in 77.8% (42 patients).

Group II, subclinical anxiety was found in 25.5% (13 patients), and clinical anxiety in 74.5% (38) patients. The results show that almost all patients with RA (group I – 100%, group II – 98.0%) have varying degrees of anxiety. In particular, clinical anxiety is the leading symptom in them, which sharply worsens the general psychological state of patients.

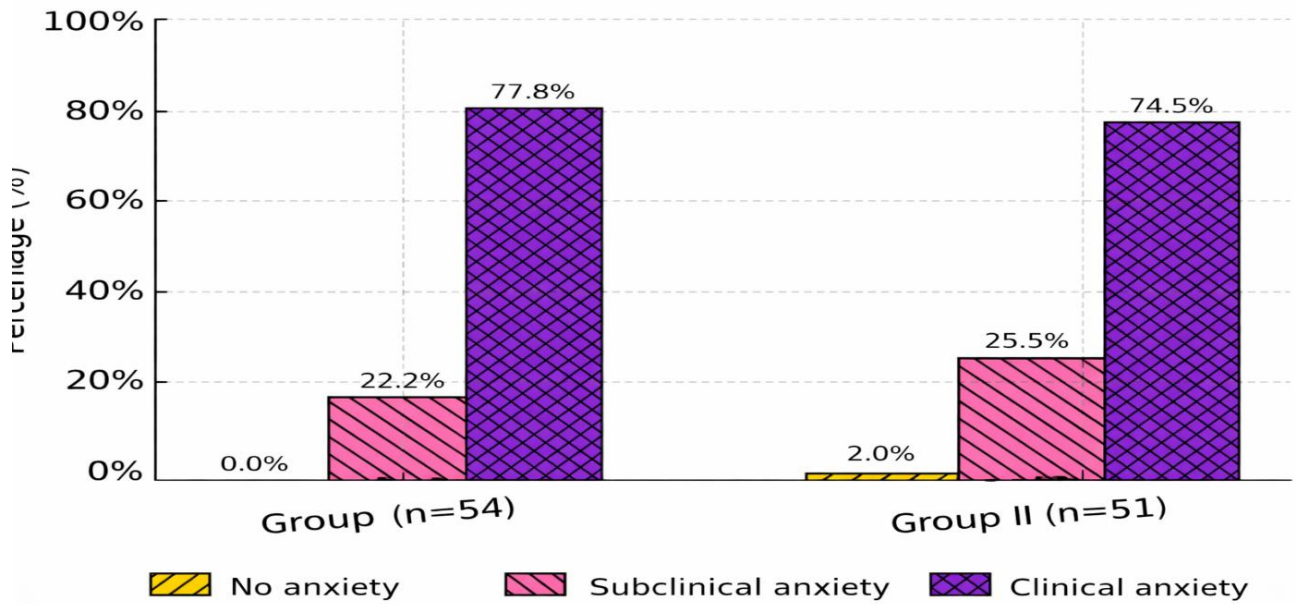


Figure 1. Analysis of anxiety scores in groups I and II

In **group I**, the absence of depression was noted in only 5.6% (3) patients. Subclinical depression was detected in 38.9% (21), and clinical depression in 55.5% (30) patients.

In **group II**, the absence of depression was observed in 9.8% (5) of the participants. Subclinical depression was noted in 43.1% (22), and clinical depression in 47.1% (24) of the patients.

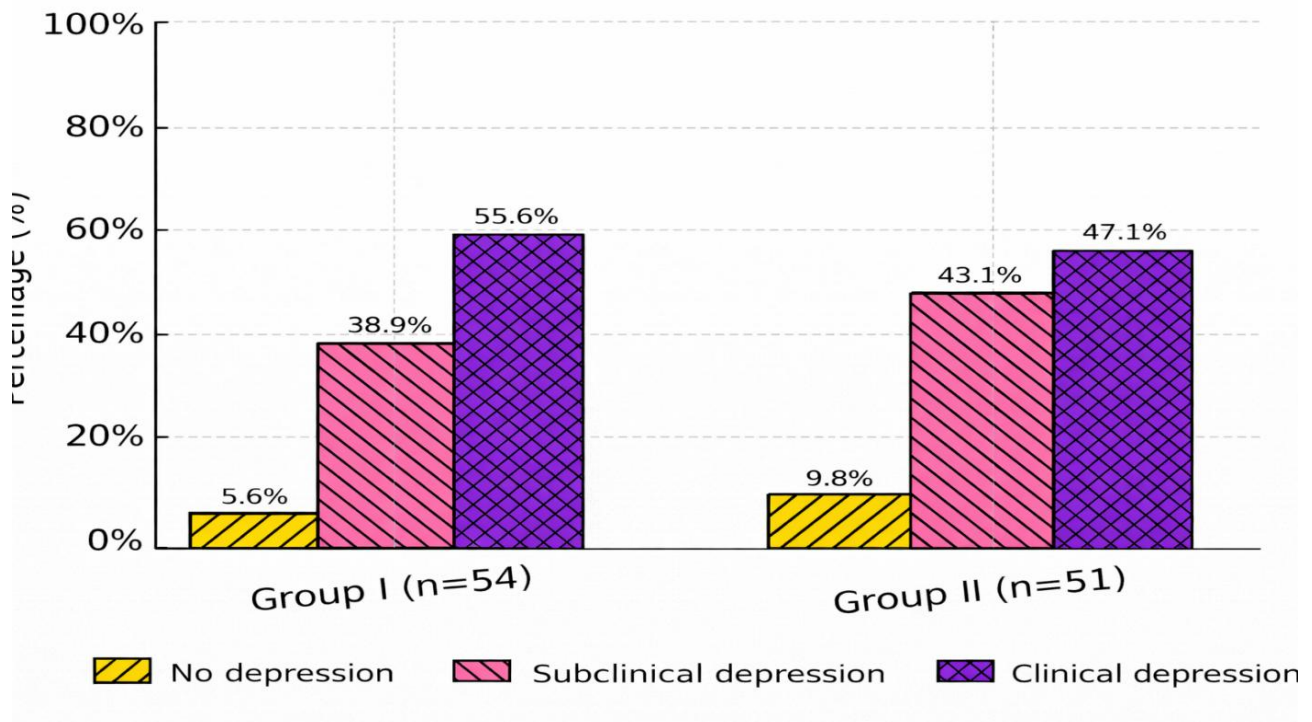


Figure 2. Analysis of depression scores in groups I and II

The results of the analysis of each component of the SF-36 questionnaire showed a sharp decrease in the quality of life in patients with RA. **Group I (n=54)** In RA patients, almost all indicators were significantly lower, especially the components of **physical activity (PF = 32.4 ± 6.8), pain (BP = 21.6 ± 5.8), and emotional role (RE = 15.4 ± 8.5)** were found to be severely impaired. This indicates the direct impact of physical limitations and pain on life activities in RA patients.

In **group II (n=51)** patients, the indicators were slightly higher than in group I, but significantly lower than in the control group. For example, low scores of **PF (35.1 ± 6.2), RP (29.5 ± 6.9), MH (32.6 ± 6.5)** indicate the persistent persistence of physical and mental limitations in RA patients. Low SF-36 indicators are associated with **the chronic inflammatory course** of rheumatoid arthritis, persistent pain syndrome, limited joint mobility, and functional impairment. Persistent pain and physical limitations reduce the daily activities of patients and limit the ability to function independently, which leads to a sharp deterioration **in the physical role and pain components**.

After psychotherapeutic intervention, significant positive dynamics were observed in the indicators of the psychoemotional state. In group I, where cognitive-behavioral therapy was used, the levels of anxiety and depression decreased steadily, and at the end of 6 months of observation, it was noted that the indicators in many patients approached the normal range.

Table 1.

Comparative analysis of anxiety scores after the use of psychopharmacotherapy and psychotherapy

		Group I, n=54		Group II, n=51	
		abs.	%	abs.	%
HADS Anxiety (before)	Anxiety no	0	0.0±0.0	1	2.0±2.0
	Subclinical anxiety	12	22.2±5.7	13	25.5±6.2
	Clinical anxiety	42	77.8±5.7	38	74.5±6.2
HADS anxiety (from 3 months later)	Anxiety no	10	18.5±5.3 ^^	0	0.0±0.0 **
	Subclinical anxiety	42	77.8±5.7 ^^^	17	33.3±6.7 ***
	Clinical anxiety	2	3.7±2.6 ^^^	34	66.7±6.7 ***
HADS anxiety (from 6 months later)	Anxiety no	47	87.0±4.6 ^^^&&&	6	11.8±4.6 *** ^&
	Subclinical anxiety	7	13.0±4.6 &&&	29	56.9±7.0 *** ^&
	Clinical anxiety	0	0.0±0.0 ^^^	15	29.4±6.4 *** ^^^&&&

Although changes were also observed in group II, where rational psychotherapy was used, they were relatively weaker, and subclinical psychoemotional disorders remained in many patients.

Table 2.

Comparative analysis of depression scores after psychopharmacotherapy and psychotherapy

		Group I, n=54		Group II, n=51	
		abs.	%	abs.	%
HADS Depression (before)	Depression no	3	5.6±3.2	13	25.5±6.2 *
	Subclinical depression	26	48.1±6.9	25	49.0±7.1
	Clinical depression	25	46.3±6.8	13	25.5±6.2 *
HADS anxiety depression (from 3 months later)	Depression no	3	5.6±3.2	13	25.5±6.2 *
	Subclinical depression	26	48.1±6.9	25	49.0±7.1
	Clinical depression	25	46.3±6.8	13	25.5±6.2 *
HADS anxiety depression (6 months later)	Depression no	29	53.7±6.8 ^{^^&&&}	13	25.5±6.2 **
	Subclinical depression	25	46.3±6.8	26	51.0±7.1
	Clinical depression	0	0.0±0.0 ^{^^&&&}	12	23.5±6.0 **

The SF-36 health -related quality of life questionnaire clearly demonstrated the high effectiveness of the psychocorrection approach, in particular, pharmacotherapy combined with cognitive-behavioral therapy (CBT), in patients with rheumatoid arthritis. The assessment in the study was carried out at baseline, after 3 months and 6 months of treatment. According to the results, the indicators of the physical component in patients **in group I (PFT + CBT)** were low before treatment, but significantly increased at 3 and 6 months of follow-up. This indicates that psychocorrection directly affected the restoration of physical activity, reducing pain intensity and improving the subjective assessment of general health.

Table 3.

Comparative analysis of indicators after psychocorrection in group I patients

Indicator	Before	3 months	6 months
PF (physical activity)	33.6±6.7	53.8±6.6	61.2±6.1
RP (physical role limitation)	27.0±7.3	78.8±5.4	85.5±5.0
BP (pain)	48.1±6.3	67.7±5.8	73.2±5.6
GH (general health)	51.6±5.3	73.8±7.0	79.6±6.5
VT (vital tone)	30.9±6.3	74.5±5.6	81.4±5.1
SF (social work)	37.5±6.3	78.8±5.4	84.6±5.0
RE (emotional role restriction)	15.4±8.7	92.3±5.0	95.5±4.5
MH (mental health)	38.9±6.3	77.8±5.5	83.7±5.2

Group II (PFT + Rational PT) Patients in group I also showed positive dynamics in the physical component, but the growth rate was lower than in group I. This suggests that rational psychotherapy is more focused on cognitive processing and alleviation of psychological factors, but its impact on physical activity is relatively limited.

Table 4.

Comparative analysis of indicators after psychocorrection in group II patients

Indicator	Before	3 months	6 months
PF (physical activity)	34.1±6.9	39.1±6.9	45.3±6, 7
RP (physical role limitation)	28.5±7.1	61.2±5.8	66.7±5.6
BP (pain)	47.9±6.4	54.1±6.3	59.0±6.1
GH (general health)	50.9±6.2	63.0±6.0	68.2±5.8
VT (vital tone)	31.4±6.2	57.0±5.8	62.5±5.5
SF (social work)	38.2±6.5	52.4±6.0	59.1±5.7
RE (emotional role restriction)	16.2±8.4	70.3±5.6	75.1±5.2
MH (mental health)	39.5±6.5	61.4±7.7	66.8±7.3

Psychocorrection combined with CBT (group I) led to a significant and stable increase in both physical and mental aspects of quality of life. **Rational psychotherapy (group II)** also gave positive results, but its effect was more pronounced in mental aspects and was generally lower than CBT. These results are an important scientific novelty for the dissertation, which is the evaluation of psychotherapeutic approaches in patients with RA, **separated into physical and mental components.**

In RA patients, the combination of **basic therapy + PFT + CBT** significantly improves all components of quality of life, and these results are maintained at 6 months. Although **rational PT** is beneficial, the effect size is smaller than that of CBT. Therefore, the systematic inclusion of CBT in clinical protocols in RA rehabilitation is a scientifically sound recommendation.

Conclusion: Psychocorrection methods used in patients with rheumatoid arthritis (RA), in particular, a combination of CBT and psychopharmacotherapy, significantly contributed to the reduction of psychoemotional disorders (anxiety, depression, social withdrawal). **Early detection of psychoemotional disorders** In RA patients, dysthymic states, anhedonia, apathy, dyssomnia, demotivational syndromes, and psychovegetative disorders are often observed. The diagnostic algorithm allows you to identify these disorders in the early stages of the disease, which helps to stabilize the mental state of patients.

Early diagnosis of anxiety-depressive disorders: Clinical and subclinical forms of anxiety and depression are highly prevalent among patients with RA. A diagnostic approach allows for early detection and development of individualized treatment strategies.

Assessing and improving quality of life: The SF-36 questionnaire measures the patient's quality of life, social functioning, the impact of emotional problems on daily activities, and mental health. This helps to determine the impact of psychological factors on the course of the underlying disease and increase patient compliance with treatment.

To achieve maximum effectiveness in the treatment of RA patients, it is necessary to focus on several areas at once. Taking into account the patient's cognitive functions and sensory-emotional sphere, and involving their close relatives and family members in the psychotherapy process further increases the effectiveness of treatment.

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