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THE ADAPTED COGNITIVE - BEHAVIORAL THERAPY FOR THE REHABILITATION OF PATIENTS AFTER MYOCARDIAL INFARCTION

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Abstract- *This study was conducted to evaluate the effect of an adapted cognitive – behavioral therapy (CBT) on quality of life of patients with myocardial infarction, as well as their psycho-emotional state. According to HADS of the clinically expressed anxiety - depressive disorder, in the main and comparative groups, are approximately equal (1,2\1,3). Subjective data of patients of the main group improved 2 times, psycho-emotional state 2,5 times, stress adaptation increased in 76% of patients in this group. The psycho-emotional state of patients in the comparison group in dynamics (on the 10th day) improved 1.7 times, however, subjective symptoms also they showed maladaptive behavior coincided. The study of the quality of life of patients in both groups according to the SF-36 protocol showed that in the main group with a tendency to highly effective and persistent correction of psycho-emotional disorders in patients after myocardial infarction.*

Keywords- *Adapted, Cognitive –Behavioral, Therapy Rehabilitation, Patients Myocardial Infarction*

I INTRODUCTION

Psychosocial factors that can contribute to atherosclerosis and cardiovascular disease can represent approximately 30% of the risk of myocardial infarction, even after adjusting for traditional risk factors. These include chronic stressors, such as low socio-economic status, limited social support, family problems and problems at work [1,2].

According to new studies, in patients with coronary heart disease, cognitive behavioral therapy (CBT) appears to be associated with a lower recurrence rate of acute myocardial infarction (AMI) and coronary heart disease [2]. In rondomizirovanoe study Medical University Uappsawas focused on emotional factors and stress management using CBT [6,7]. A total of 362 men and women aged 75 years and younger who were hospitalized with heart disease were included. Of the patients, the control group (170 patients) received conventional therapy, while the intervention group (192 patients) received traditional therapy and CBT. The use of CBT was associated with lower rates of recurrent AMI (P = 0.007) and non-fatal and lethal relapses of coronary heart disease (P = 0.002). Mortality from all causes did not differ significantly between groups (P = .28) [6].

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In this regard, with the above , **the purpose** of our work was to evaluate the effect of an adapted cognitive - behavioral therapy on quality of life of patients with myocardial infarction, as well as their psycho-emotional state.

II MATERIALS AND METHODS

The study involved 90 patients who had myocardial infarction with Q wave. Observation began on day 3 after acute heart attack. The average age is 53 ± 6.5 years. Sex ratio - men 63, women 27. The main diagnosis was verified by general clinical, laboratory and instrumental methods of research. To establish a psycho-emotional disorder - neurotic depression - the HADS (Hospital anxiety depression scale) questionnaire was used . Psychological status, social status, stress factors were recorded in a medical psychological profile, which gave full general psychological characteristics of a patient who had myocardial infarction with neurotic depression.

To assess the effectiveness of adapted CBT, we selected randomly 45 patients who made up the main group for the introduction of adapted CBT. As well as 45 patients — a comparative group who used the classic CBT, described in the scientific work of N. V. Sorokin and his co-authors on the topic: “Medical and Psychophysiological Rehabilitation of Patients Having Myocardial Infarction” (Patent No. 2611888A61M21 \ 00, published 03/01/2017, Bull. No. 1) [5]. The control group consisted of healthy individuals - 30.

The following parameters were used as criteria for evaluating adaptive CBT [4]:

1) a study of the quality of life of patients according to the SF -36 protocol;
2) well-being parameters;
3) changes in personality and abilities;
4) changes in the use of free time;
5) changes in work or profession;
6) changes in physical parameters.

III THE RESULTS OF THE STUDY

At the initial stages, we revealed the presence of psycho-emotional disorders using the Hospital Anxiety Depression Scale (Table No. 1).

Table 1: Comparative analysis of the psycho-emotional sphere of patients in the main and control groups according to the HADS questionnaire

No.	**Indicators**	**Main group** **n = 45**	**Comparative** **Group** **n = 45**
1.	Clinically expressed ADD	36 (80%) 16 ± 3.5 points	34 (76%) 15 ± 3.5 points
2.	Clinically Depressed	6 (13%)	5 (11%)

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		14 ± 4.7 points	14 ± 4.5 points
3.	Clinically expressed anxiety	3 (7%) 17 ± 5.8 points	6 (13%) 18 ± 6.5 points

ρ *≥0.03*

According to this table it follows that the indicators of the clinically expressed anxiety - depressive disorder (ADD), in the main and comparative groups, are approximately equal. And also, separately depression and anxiety as a single indicator of the psycho-emotional state were observed equally, both in the main and in the comparison group. Sub-clinically expressed indicators and norms were not noted.

When analyzing the objective state of patients in both groups, the assessment of the psycho-emotional sphere came to the fore. The priority correction method evaluated the effect of the adaptive method of psychotherapy on the main group of patients.

Subjective data of patients of the main group improved 2 times, psycho-emotional state 2,5 times, motivational thoughts were expressed by about 77% of patients, stress adaptation increased in 76% of patients in this group. The psycho-emotional state of patients in the comparison group in dynamics (on the 10th day) improved 1.7 times, however, subjective symptoms of apathy, antipathy thoughts, and also showed maladaptive behavior coincided.
A comparative analysis of the psycho-emotional sphere of patients of both groups at the third stage of adapted CBT (6-8 days) gave significant shifts in anticipatory conditions towards stable and adequate behavioral reactions (Table #2).

Table 2: Psycho-emotional sphere of patients of both groups after a course of traditional CBP and adapted CBP according to the HADS questionnaire

The main group (n = 45)				**ρ**
Indicator	**On the 3rd day**	***Indicator***	**On the 10th day**	
Clinically expressed TDR	36 (80%) 16 ± 3.5 points	Sub-clinically expressed TDR	25 (55, 5%)	*≥0.03*
		No symptoms of TDR	-	
Clinically Depressed	6 (13%) 14 ± 4.7 points	Subclinically expressed depression	7 (15, 5%)	*≥0.04*
		No symptoms of depression	5 (11.2 %)	*≥0.03*
Clinically expressed anxiety	3 (7%) 17 ± 5.8 points	Subclinical anxiety	8 (17.8 %)	*≥0.05*
Comparison Group (n = 45)				**ρ**
Indicator	**On the 3rd day**	***Indicator***	**On the 10th day**	
Clinically expressed TDR	34 (76%) 15 ± 3.5 points	Clinically expressed TDR	14 (31.2 %)	*≥0.03*
		Subclinically expressed TDR	17 (37.8%)	*≥0.05*
Clinically Depressed	5 (11%) 14 ± 4.5 points	Subclinically expressed depression	4 (9 %)	*≥0.05*
		Clinically Depressed	3 (6.6 %)	*≥0.03*

Clinically expressed anxiety	6 (13%) 18 ± 6.5 points	Clinically expressed anxiety	7 (15 , 4 %)	≥*0.05*

According to this table, in the patients of the main group, in the dynamics, the psycho-emotional state from clinically expressed symptoms of depression and anxiety passed to the subclinical phase or the complete absence of symptoms.

IV EVALUATION OF THE EFFECTIVENESS OF ADAPTED CBP

The study of the quality of life of patients in both groups according to the SF-36 protocol showed the following results. (Diagram №3)

Table 3: Assessment of the indicators of the scales of the SF-36 questionnaire in patients who underwent myocardial infarction in dynamics

Indicators SF-36	**Main group (n = 15)**		**Control group (n = 10)**	
	Before psycho correction	**After psycho correction**	**Before psycho correction**	**After psycho correction**
Vital activity	38,32±0,14	43,05±6,7*	33,14±0,28	38,45±1,5**
Social functioning	39,25±0,12	44,43±3,4*	38,13±0,14	40,23±2,7**
Role functioning due to emotional state	41,33±0,21	48,07±4,7*	42,32±0,25	43,44±3,5**
Physical component of health	**47,08±6,49**	**48,90±6,7***	**46,67±5,4**	**45,02±2,7****
Mental health component	**41,03±16,21**	**49,64±12,76***	**42,07±12,34**	**44,02±8,7****

*ρ≤0,054

** ρ≤0,03

According to this diagram, indicators of the psychological component according to the SF-36 scale in the main group with a tendency to highly effective and persistent correction of psycho-emotional disorders in patients after myocardial infarction.

V CONCLUSION

Based on the results of this study, the following conclusion can be drawn that adapted cognitive-behavioral psychotherapy is highly effective as a method for the correction of psycho-emotional disorders in patients after myocardial infarction. This method provides an individual and differentiated approach to each patient, taking into account age, emotional and personal characteristics, language culture, Uzbek mentality of patients, as well as the level of education, social environment and experience of the disease.

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