# **Anxiety and Depression in Patients with Rheumatic diseases**

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Abstract. The state of psycho-emotional sphere of patients is off paramount importance for many diseases of internal organs. Recent years, particular attention is drawn to the study of this problem. A study of anxiety and depression in patients with rheumatic diseases was conducted on the basis of Outpatients Department in 137 patients with rheumatic diseases; among them were 79female and 58 male, aged 18 to 77 years. Our research showed that respondents of patients with rheumatic diseases depression was noted in 57%, anxiety – in 68%, while anxiety and depression in 45% of patients. Given the role of anxiety and depression during the rheumatic diseases, in its burdens should be paid special attention to physicians rheumatologists on this fact, what remains in addition to the attention of doctors.

Keywords: Anxiety, depression, rheumatic diseases, HADS.

#### INTRODUCTION

Anxiety and depression is one of the most common variants of borderline mental pathology. According to the data obtained in the survey of the U.S. population, the risk of developing an anxiety disorder in their lifetime is 24.5%, according to a large-scale European study - 16%. Every fourth people on the planet at least once in his life suffered an anxiety disorder, and their incidence is - 17.7% in the general population in a year [6,9].

Data on the prevalence of anxiety and depression in patients in general practice are different, but the numbers in all the studies are large enough. In the WHO multinational study of 14 primary care Medical Clinics, located in major cities around the world, psychological disorders were detected in 24% of those seeking treatment. Studies conducted in the U.S. showed that the proportion of patients with depression with somatic diseases increased from 50% in 1987 to 64% in 2001. In a large international European research depression detected at an average of 69% (45-94%) of patients with somatic diseases.[2,4].

Anxiety and depression in medical practice are extremely common, as evidenced by clinical experience in different fields. Anxiety - a universal psycho-physiological phenomenon associated with the reaction to stress. Adaptive value of anxiety is to mobilize the body to quickly change the behavior under the influence of external or internal conditions. Anxiety is a normal emotional development of man, if it is short-lived and associated with adverse or uncertain life rescheduling and grows up in the context of high subjective importance of choice, with the external threat, lack of information and time. Normal anxiety helps to adapt to different situations. If the alarm takes constant in nature, it can be a factor of various diseases or worsen existing ones, especially chronic diseases. Pathological anxiety is one from the very common disorder of the human psyche in the modern society, significantly violating the quality of human life and activity. Pathological anxiety disproportionate to the actual threat or is not connected with it, it is inadequate value and greatly reduces productivity and adaptability [5].

Depression - is the suppression of all mental functions, including reduced mental alertness and performance, motor retardation and abnormalities in the somatic sphere. Along with the oppression (in the form of vital depression) depression includes ideological and motor braking with reduced incentives to work or agitation (up to apathy). Inherent depressive patients with mental hyperalgesia (emotional pain) are associated with feelings of guilt, low self-esteem, suicidal tendencies, painful physical self feeling (disorders of sleep and early awakening, a sharp reduction in appetite until depressive anorexia with weight loss of 5% or more from baseline to month, decreased libido, menstrual cycle until amenorrhea and other somatic vegetative dysfunction), that may determine the clinical picture [5]. Anxious depression is usually associated with excessive use of medical care ("syndrome great history") and worsens physical diseases increase, the risk of exacerbation. This is due to the fact that in patients with depressive symptoms compliance

with medical recommendations is significantly reduced. Patients do not do regularly recommended treatment, rarely maintain a healthy lifestyle, they are rarely involved in the activities of rehabilitation and secondary prevention. Depression is a serious impact on the adaptability of the patient and quality of life. In patients the classic symptoms of somatic depression are rare: in practice, the doctor sees the masked forms [3,5,8].

At present manifestation of depressive disorder as a consequence of rheumatic diseases is of particular importance in terms of an integrated approach to diagnosis and treatment. The combination of depression with rheumatic disorders is serious problem. Rheumatologist have great difficulties in diagnosis and treatment of afferent disorders in patients, who are waiting for a not to referral to a psychiatrist, but for a specific help from his rheumatologist, who is unable to cope with the psycho-emotional disorders of the patient, without the advice of a psychiatrist [2].

Especially rapidly are developing anxiety and depressive disorders in patients who have psychosocial risk factors: The death of loved ones, divorce or separation, loss of work, loneliness, lack of support, financial problems, alcohol or psychotropic substances, stable family and social maladjustment [7,8].

Management of chronic illness is one of the main challenges of global health in the 21st century. WHO notes that by 2020, depressive disorders are the second most common after Ischemic heart disease [6]. Rheumatic diseases have a physical, psychological and socio-economic impact on the person. From a psychological point of view, patients with rheumatic diseases fear of pain, stiffness and fatigue. In most fear is connected with disability. Patients have problems regarding loss of function, inability to keep a job and the potential socio-economic impacts. The potential toxicity of long-term treatment also causes fear [9].

Patients with rheumatic diseases often feel alone in their suffering. Some patients believe that the truth of their pain and state is questioned. To reduce the psychological problems in patients with rheumatic disease, the physician should be frank with patients on matters relating to the nature of his illness, to provide it with information about the disease and to discuss not only treatment, but also any changes in a patient's response to treatment. If a patient with rheumatic disease occurs long periods of emotional distress that interfere with daily life and full participation in treatment, then it is necessary to provide Psychiatric counseling, it requires the use of psychotherapy and pharmacotherapy [9].

It is proved that the aggressive feelings and conflicts in patients with rheumatoid arthritis lead to increased Electromyographic activity, which is defined mostly in the affected area and in the muscles around the affected joint. It can not be denied the presence of a vicious cycle in rheumatic diseases: pain, caused by stimulation of receptors in the joints, in periarticular tissues, in muscles, leads to reflective ischemic disease state voltage. It is possible that the affected joint, microtrauma and autoimmune response may have a reinforcing effect on the situational and psychological due to increased muscle tone [7,8].

Range of psycho-emotional problems in rheumatic diseases:

- 1. Depression and anxiety
- 2. Uncertainty and loss of control of the pathological process.
- 3. Reduced self-esteem and self-confidence.
- 4. Fear of becoming physically dependent and inactive.
- 5. Loss of professional autonomy, the threat of career and personal role in society.
- 6. Increasing stress due to changes in social conditions and limited mobility [4].

There are many methods for the determination of anxiety and depression in clinical practice: Hamilton Rating Scale for Anxiety and Depression, Back Anxiety and Depression, Inventory, Zung Self-Rating Scale for Anxiety and Depression, Hospital Anxiety and Depression Scale(HADS), Social Phobia Inventory, Panic Disorder Severity Scale, but among them only HADS is designed to study Anxiety and Depression in

somatic patients, which could be used not only by psychiatrists, clinical psychologists, but also by therapists [7].

HADS was originally developed by Zigmond and Snaith (1983) and is commonly used by internal doctors to determine the levels of Anxiety and Depression that a patient is experiencing. The first review about using HADS in the Internal Medicine practice was published in 1997: "The HADS was found to perform well in assessing severity and caseness of Anxiety disorders and Depression in both somatic, and psychiatric cases and (not only in hospital practice for which it was first designed) in primary care patients and the general population." In addition to frequent validation for use in elderly HADS has been validated for use in adolescents [9,10].

Zigmond and Snaith created this outcome measure specifically to avoid reliance on aspects of these conditions that are also common somatic symptoms of illness, for example fatigue and insomnia or hypersomnia. This it was hoped would create a tool for the detection of Anxiety and Depression in people with Physical health problems [9].

## **MATERIALS AND METHODS**

A study of anxiety and depression in patients with rheumatic diseases was conducted on the basis of Outpatients Department in 137 patients with rheumatic diseases; among them were 79 male and 58 female, aged 18 to 77 years. Among them were patients with rheumathoid arthritis, sclerodermy, systemic lupus erythematosus, rheumatic fever, ankylosing spondylitis, osteoarthrosis, etc. For our studies was selected Hospital Anxiety and Depression Scale of which is especially used by doctors of Internal Medicine in the conditions of Outpatient Department.

The HADS comprises statements which the patient's rates based on their experience over the past week. The 14 statements are relevant to either generated anxiety (7 statements) or depression (7 statements), the later being largely (but not entirely) composed of reflections of the state of anhedomia (inability to enjoy oneself or take a pleasure in everyday things enjoyed normally).

Even-numbered questions relate to depression and odd-numbered questions relate to anxiety. Each question has 4 possible responses. Responses are scaled on a scale from 3 to 0. The maximum scale is therefore 21 for depression and 21 for anxiety. A scale of 11 or higher indicates the probable presence of the mood disorder with a score of 8 to 10 being just suggestive of the pressure of the respective state. The two subscales, anxiety and depression have been found to be independent measures. In its current form the HADS is now divided into four ranges: normal (0-7), mild, subclinical (8-10), moderate (11-15) and severe (16-21).

#### DISCUSSION

The study was inducted in an outpatient clinic. After the examination by the physician, the researches (137 patients) conducted an interview. During that interview "Depression" was assessed according up to the questions. Each item had been answered by the patient on a four point (0-3) response category so the possible scores ranged from 0 to 21 for depression. An analysis of scores on the two subscales of a further sample, in the same clinical setting, enabled provision of information that a score of 0 to 7 for either subscale could be regarded as being in the normal range, a score of 11 or higher indicating probable presence ("caseness") of the mood disorder and a score of 8 to 10 being just suggestive of the presence of the respective state. Further work indicated that the two subscales, anxiety and depression, were independent measures. Subsequent experience enabled a division of each mood state info four rages: normal, mild (subclinical), moderate and severe and it is in this form that the HADS is now issued. In the case of illiteracy, or poor vision, the wording of the items and possible responses may be read to the respondent.

Our research showed that respondents of patients with rheumatic diseases anxiety was noted in 68%, (tab.1) depression in 57% patients (tab. 2), both anxiety and depression in 45% of patients. (tab.3) subclinical anxiety was noted in 9 patients, moderate anxiety-29%, and severe anxiety-30%. (tab.1) as for the subclinical depression (8-10) it was observed in 21%, depression moderate (11-15scores) - 30%, and severe depression (16-21 scores) - 6%. (tab. 2) It should be noted that the moderate anxiety and severe anxiety and depression especially were noted in women (74%), at a young age (18-30 years), in patients with rheumatoid arthritis and ankylosing spondylitis, and especially in those patients who have long been at the further increase of basic medicines.

Tab.1 Index of Prevalence of Anxiety in Patients with Different Rheumatic Diseases

	Amount of Patients				Anxiety			Total	
Disease	Total	F.	M.	Norm (0-7 sc.)	Subclinic al (8-10 sc)	Moderate (11-15 sc.)	Severe (16-21 sc.)	Amount	%
Osteoarthritis	31	18	13	14-45,2%	4-12,9%	7-22,6 %	6-19,3%	17	54,8
Ankylosing Spondylitis	29	1	28	9-31%	2-7%	9-31%	9-31%	20	69
Rheumatoid Arthritis	28	26	2	4-14,3%	1-3,6%	8-28,5%	15-53,6%	24	85,7
Systemic Lupus Erythematosus	11	10	1	3-27,3%	1-9%	4-36,4%	3-27,3%	8	72,7
Systemic Sclerodermia	9	8	1	2-22,2%	1-19,5%	4-44,5%	2-22,2%	7	77,8
Rheumatism	8	5	3	4-50%	2-25%	-	2-25%	4	50
Dermatomyositis/ Polymyositis	4	-	4	1-25%	-	2-50%	1-25%	3	75
Other Rheumatic Diseases	17	11	6	7-41,2%	1-5,9%	6-35,3%	3-17,6%	10	58,8
Total	137	79	58	44-32%	12-9%	40-29%	41-30%	93	68

Tab.2 Index of Prevalence of Depression in Patients with Different Rheumatic Diseases

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	Amount of Patients				Depression			Total	
Disease	Total	F.	M.	Norm (0-7 sc.)	Subclinic al (8-10 sc)	Moderate (11-15 sc.)	Severe (16-21 sc.)	Amount	%
Osteoarthritis	31	18	13	21-67,8%	4-12,9%	4-12,9%	2-6,4%	10	32,2
Ankylosing Spondylitis	29	1	28	13-44,8%	6-20,7%	9-31%	1-3,5%	16	55,2
Rheumatoid Arthritis	28	26	2	8-28,6%	5-17,8%	12-42,9%	3-10,7%	20	71,4
Systemic Lupus Erythematosus	11	10	1	4-36,4%	2-18,2%	4-36,3%	1-9,1%	7	63,6
Systemic Sclerodermia	9	8	1	3-33,3%	3-33,3%	3-33,3%	-	6	66,7
Rheumatism	8	5	3	3-37,5%	3-37,5%	2-25%	-	5	62,5
Dermatomyositis/ Polymyositis	4	-	4	2-50%	1-25%	1-25%	-	2	50
Other Rheumatic Diseases	17	11	6	5-29,4%	5-29,4%	6-35,2%	1-5,9%	12	70,6
Total	137	79	58	59-43%	29-21%	41-30%	8-6%	78	57

Tab. 3 Index of Prevalence of Anxiety and Depression in Patients with Different Rheumatic

Disease	Amount of Patients	Anxiety and Depression	%
Osteoarthritis	31	9	29
Ankylosing Spondylitis	29	12	41,4
Rheumatoid Arthritis	28	18	64,3
Systemic Lupus Erythematosus	11	6	55
Systemic Sclerodermia	9	3	33,3
Rheumatism	8	3	37,5
Dermatomyositis/ Polymyositis	4	1	25
Other Rheumatic Diseases	17	10	60
Total	137	62	45

## CONCLUSION:

There can be no doubt of the need to assess the role of emotional factors in clinical practice. A brief questionnaire is provided to the purpose.

For our researches we choose HADS. Many studies had confirmed the validity of the HADS in the setting for which it was designed. Other studies have shown it to be a useful instrument in other areas of clinical practice. Patients have no difficulty in understanding the reason for request to answer the questionnaire. The HADS only takes 2 to 5 minutes to complete.

Based on studies of patients revealed that 68% of them are anxiety, depression-57%, both anxiety and depression in 45%, these figures slightly higher than the literature data. As a result of a direct link research risk disorder, depressive spectrum with sex, age, duration of disease. In women, depression and anxiety occurs 1.5 times more frequently than men; as older is patient, as more severe psycho-emotional disorders are noted. Especially there are higher frequencies of manifestation of abuse in patients with rheumatoid arthritis and Bechterew's Disease, with duration greater than 5 years, and in patients who are on the basic therapy. In parallel with examining patients, the attention was paid to, whether they were treated with antidepressants. Antidepressant therapy squandered only 27% of patients.

Given the role of anxiety and depression during the rheumatic diseases, in its burdens should be paid special attention to physicians rheumatologists on this fact, what remains in addition to the attention of doctors.

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Докладът е рецензиран.