



ASSESSMENT OF MENTAL DISORDERS IN INDIVIDUALS WITH
BRONCHIAL ASTHMA

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Abstract. *Bronchial asthma is a chronic disease that significantly affects not only the somatic but also the psycho-emotional state of patients. The aim of this study was to assess the impact of bronchial asthma of severity grades I and IV on the development of anxiety and depressive disorders. A total of 60 patients were included in the study and divided into two groups according to disease severity. The psycho-emotional state was evaluated using an adapted version of the Hospital Anxiety and Depression Scale (HADS). It was found that patients with severe bronchial asthma (grade IV) exhibited significantly higher levels of anxiety and depressive disorders compared to patients with mild disease. The findings highlight the importance of considering the mental health status of patients in the management of bronchial asthma.*

Keywords: *bronchial asthma, anxiety, depression, mental disorders, quality of life.*

Introduction: In recent years, there has been a steady global increase in the prevalence of chronic somatic diseases. According to WHO data, diseases of the respiratory system, particularly bronchial asthma, occupy a significant place among them. Bronchial asthma is a chronic respiratory disease with high prevalence, affecting from 1% to 18% of the population depending on the country and age group [3]

In addition to pronounced somatic manifestations, bronchial asthma has a significant impact on the psycho-emotional state of patients. The presence of a



chronic disease accompanied by recurrent attacks of suffocation creates a persistent sense of life threat. This leads to the development of anxiety, emotional tension, and a decrease in quality of life.

According to various clinical studies, 15–25% of patients with bronchial asthma experience different forms of mental disturbances. The most common mental disorders are anxiety and depression [10]. Numerous epidemiological studies have shown that patients with asthma are more likely to suffer from anxiety and depression compared to individuals without asthma [5, 7, 1, 9]. These changes may develop both during asthma attacks and in the inter-attack period. It is also known that patients with asthma who suffer from anxiety or depression tend to have poorer disease control, more frequent exacerbations, and consequently a worse prognosis [8, 2].

During asthma attacks, patients experience severe dyspnea, a feeling of air hunger, tachycardia, and a sensation of suffocation. These symptoms are often accompanied by intense fear, which may escalate into panic. Patients frequently describe attacks as a state associated with fear of death. Studies have identified a relationship between bronchial asthma [4], respiratory diseases [6], and panic attacks among adults in the general population. Such experiences may become psychologically fixed and persist even after the somatic symptoms subside.

In the inter-attack period, many patients continue to experience increased anxiety related to the anticipation of a new attack. In addition, the chronic course of the disease, as well as the need for and dependence on continuous medication, also affect the psychological state of patients.

Despite significant advances in modern medicine in the diagnosis and treatment of bronchial asthma, the psycho-emotional aspects of this disease remain insufficiently studied. Therefore, studying mental changes in patients with different severities of bronchial asthma is of particular relevance.

Aim of the study. The aim of this study is to determine the impact of bronchial asthma of severity grades I and IV on mental changes - namely anxiety and depressive manifestations - and to examine their clinical features in patients.



Materials and Methods. The study was conducted at the Republican Specialized Scientific and Practical Center of Phthiology and Pulmonology. The study included patients with bronchial asthma of severity grades I and IV according to the international GINA classification.

To assess psycho-emotional disorders, a questionnaire based on the Hospital Anxiety and Depression Scale (HADS) was used. This questionnaire was adapted for clinical practice by Kh.N. Kuchkarov and M.S. Nayimova. The method allows identification of anxiety and depressive symptoms in patients with somatic diseases.

The survey was conducted among patients receiving both inpatient and outpatient treatment. Participants were asked to answer a series of questions assessing their emotional state, level of anxiety, and presence of depressive symptoms.

A total of 60 patients participated in the study, including 28 women (46.7%) and 32 men (53.3%). Patients were divided into two groups depending on the severity of bronchial asthma. The control group consisted of patients with grade I asthma — 33 individuals (55%), including 16 women (48%) and 17 men (52%). The main group included patients with grade IV asthma — 27 individuals (45%), among whom there were 12 women (44.4%) and 15 men (55.6%).

The age distribution of patients was as follows:

- 20–34 years — 12 patients (20%), mean age 29.1 ± 0.8 years
- 35–49 years — 21 patients (35%), mean age 42.1 ± 0.8 years
- 50–65 years — 27 patients (45%), mean age 57.5 ± 0.8 years

It should be noted that the majority of patients — 48 individuals (80%) — had comorbid somatic diseases.

In the control group of patients with grade I bronchial asthma, 24 patients (approximately 73%) had a low level of anxiety and depression, while 9 patients (approximately 27%) demonstrated a moderate level of these symptoms. In most patients of this group, the psycho-emotional state remained relatively stable, and pronounced mental disorders were observed significantly less frequently.



In the main group of patients with grade IV bronchial asthma, different results were obtained. A high level of anxiety and depression was detected in 23 patients (approximately 85%), while 4 patients (approximately 15%) demonstrated a moderate level of these psycho-emotional disturbances.

Patient group	Number of patients	Low level of anxiety and depression	Moderate level of anxiety and depression	High level of anxiety and depression
Bronchial asthma grade I (control group)	33	24 (72,7%)	9 (27,3%)	-
Bronchial asthma grade IV (main group)	27	-	4 (14,8%)	23 (85,2%)

Table 1. Distribution of anxiety and depression levels in patients with bronchial asthma of grades I and IV severity.

The obtained results indicate that as the severity of bronchial asthma increases, the likelihood of developing anxiety and depressive disorders also rises significantly.

Conclusion. The study demonstrated that patients with grade IV bronchial asthma are significantly more likely to exhibit pronounced anxiety and depressive disorders compared to patients with grade I bronchial asthma. In most patients with a mild course of the disease, a low or moderate level of psycho-emotional disturbances was observed, whereas in severe cases a high level of anxiety and depression predominated. Thus, a direct relationship between the severity of bronchial asthma and the intensity of mental disorders was identified.

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