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Original Research Article

Psychological features and emotional frustrations of chronic obstructive pulmonary diseases and asthma patients

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ABSTRACT

Introduction: Research concerning the psychological effects of living with chronic obstructive pulmonary disease (COPD) and asthma demonstrates that patients with respiratory diseases are frequently in a far worse condition than patients with cancer. Studying such patients' psychological features is an extremely important problem of modern public healthcare. Results of further research in this area will help to conceive new methods of treatment in order to improve patients' quality of life.

Aim: This work aimed at the studying of emotional frustrations and psychological features concerning patients with COPD and asthma.

Materials and methods: By means of the MMPI technique we surveyed 30 mild and moderate COPD patients and 38 mild and moderate asthma patients. Practically healthy 30 individuals, comparable with reference to age and sex with surveyed patients, served as the control group.

Results and discussion: Asthma patients revealed the following character features: the presence of proof disturbing-depressive frustration with cenestopathy and the tendency to form restrictive behavior. The received results enable us to conclude that the revealed psychological and emotional infringements demonstrated by asthma patients become more expressed as their disease progresses, whereas this progression reduces the degree of patients' social adaptation. A list of standardized symptoms and syndromes of the unified estimation of patients' mental status was employed to assess the emotional frustration of COPD and asthma patients. With reference to asthma patients, emotional frustration was revealed in 22 individuals (65.8% of cases). The research demonstrated that emotional infringements were observed in 19 COPD patients (63.4% of cases from the total number of patients).

Conclusions: The obtained data with respect to the presence of psychological features and emotional frustration of COPD and asthma patients indicate that it is necessary to consider the creation of programs involving individual psychological rehabilitation.

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1. Introduction

Chronic obstructive pulmonary disease (COPD) and asthma are the most common chronic respiratory conditions.[1,5,8,15] COPD is progressive. Its physical and psychological effects on an individual increase.[2,6,7,15] Asthma may not result in an inevitable decline in health status but is difficult to control. The aim of asthma control is to prevent symptoms from occurring; failure to do so may result in significant disability.[1,3,9]

The physiological signs and symptoms of asthma and COPD can have a profound disabling effect on patients. Symptoms frequently include dyspnea, cough and production of sputum. The expression of emotions is closely linked with dyspnea and some patients may avoid emotions as an adaptive coping mechanism.[4,10,14,17] This may result in patients living in an "emotional straightjacket," which may then predispose them to or compound existing anxiety and depression.[3] Impaired physical and social dimensions of daily living often result in a sedentary lifestyle with progressive dyspnea and fatigue. This in turn leads to social isolation and an inability to participate in many activities of daily living. Research concerning the psychological effects of living with asthma and COPD demonstrates that patients with a respiratory disease are often in a far worse condition than patients with cancer.[1,2,3,4,5,11,15,16,17] Studying such patients' psychological features is an extremely important problem of modern public healthcare. Results of further research in this area will help to conceive new methods of treatment in order to improve patients' quality of life.[13,17,18]

2. Aim

This work aims at the studying of emotional frustrations and psychological features of patients with COPD and asthma.

3. Materials and methods

By means of the MMPI technique and a list of the standardized symptoms and syndromes of the unified estimation of a patient's mental status, 30 mild and moderate COPD patients and 38 mild and moderate asthma patients were surveyed.

4. Results and discussion

By means of the MMPI technique 30 mild and moderate COPD patients were surveyed. Practically healthy 30 individuals, comparable with reference to age and sex with surveyed patients, served as a control group. Their profile obtained in the MMPI test did not exceed the values of the conditional mental norm.

The average profile of COPD patients was characterized by a significant increase in comparison with the healthy group as regards scales of a neurotic triad (1, 2, 3) ($p<0.01$, $p<0.05$, $p<0.01$) (Fig. 1).

Moreover, the profile lifting is revealed in scales F, 4, 6, 7 and 8. The peak in the F scale, combined with the lifting in the left part of the profile (neurotic scales) and the 7th scale, testifies

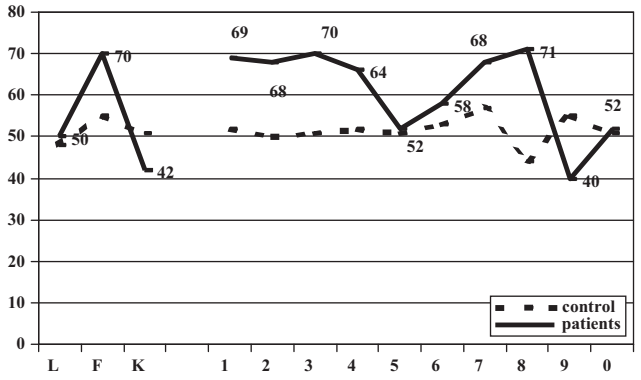

Fig. 1 – Average profile of the COPD patients.

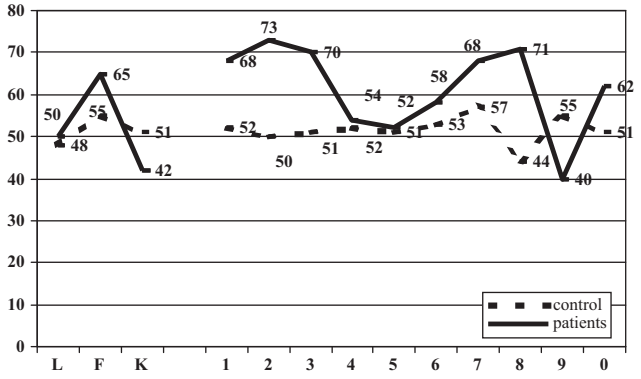

Fig. 2 – Average profile of the asthma patients.

to the presence of internal intensity, anxiety with the expressed component of anxiety reactions, phobic and depressive syndromes with an insufficiently effective elimination of anxiety in the COPD patients. Significant differences with the control group on the 4th scale ($p<0.05$) testify to the infringement of social adaptation in such patients. This is also confirmed by the significant difference on the 8th scale characterizing the presence of autism and difficulties regarding social contacts.

The MMPI test revealed the following psychological features in COPD patients: a lowered control over emotions, their insufficient comprehension, propensity toward a depressive type of reaction under conditions of stress, and ipochondric development of the person and autism.

The received results of the research enable us to conclude that the revealed psychological features demonstrated by COPD patients become more expressed as their disease progresses and they undergo a number of changes reflecting the depth of "living in disease."

By means of the MMPI technique we also surveyed 38 mild and moderate asthma patients. The average profile of the asthma patients was characterized by a significant increase in comparison with the healthy group as regards the scales of a neurotic triad (1, 2, 3) ($p<0.001$, $p<0.05$, $p<0.01$) (Fig. 2).

Moreover, the profile lifting is revealed in scales F, 7, 8, and 0. The peak in the F scale, combined with the lifting in the left part of the profile (neurotic scales) and the 7th scale, testifies to the presence of asthenic and ipochondric syndromes in asthma patients. Significantly higher values of the F, 2, 8 and

Table 1 – Emotional frustration in COPD patients.

Emotional frustration	COPD patients ($n=30$)				Total	
	Men		Women			
	Abs.	%	Abs.	%	Abs.	%
Depression	7	23.3	4	13.3	11	36.7
Anxiety	2	6.6	3	10.0	5	16.7
Anxiety and depression	1	3.3	2	6.6	3	10.0
Total	10	71.4	9	62.5	19	63.4

Table 2 – Emotional frustration in asthma patients.

Emotional frustration	Asthma patients ($n=38$)				Total	
	Men		Women			
	Abs.	%	Abs.	%	Abs.	%
Depression	4	10.5	2	5.3	6	15.8
Anxiety	6	15.8	8	21.1	14	36.8
Other	–	–	2	5.3	2	5.3
Total	10	26.3	12	31.6	22	57.9

0 scales ($p<0.05$) show the ability of asthma patients to respond to distress by the development of depressive reactions and reveal in such patients not only a lowered mood, but also personal features such as a propensity to excitement. Indicators such as the raised experience of failures and the raised feeling of fault with the self-critical relation to the shortcomings also testify to difficulties concerning the social contacts exhibited by asthma patients.

Higher indicators in the 8th scale in combination with the dominating 1st scale in the profile testify to ipochondric manifestations with the presence of cenestopathy. Indicators such as the raised experience of failures, uncertainty, the raised feeling of fault with the self-critical relation to the shortcomings also testify to difficulties concerning the social contacts of asthma patients.

Thus, the following character features were revealed in asthma patients: the presence of proof anxiety-depressive frustration with the occurrence of cenestopathy and the tendency to form restrictive behavior. The received results enable us to conclude that the revealed psychological and emotional infringements demonstrated by asthma patients become more expressed as their disease progresses, whereas this reduces the degree of patients' social adaptation.

A list of standardized symptoms and syndromes of the unified estimation of a patient's mental status was employed to assess the emotional frustration of COPD and asthma patients.

The research revealed that in 19 COPD patients (63.4% of cases from the total number of patients) emotional infringements were observed. From this number, in 11 patients (36.7%) the depressive syndrome was marked; anxiety frustration in five patients (16.6%); and mixed frustration (anxiety and depression) in three patients (13.3%). Research results are presented in Table 1.

Moreover, in COPD patients we revealed a correlation between the presence of emotional frustration and FEV_1 value ($r_s=-0.81$, $p<0.01$).

As regards asthma patients, emotional frustration was revealed in 22 individuals (65.8% of cases). From this number, in six cases (15.8%) the depressive syndrome was marked; anxiety frustration in 14 cases (36.8%); and other emotional frustrations in two patients (6.7%). Research results are presented in Table 2.

It is necessary to note that depressive frustration prevailed in men, whereas anxiety and other frustration types prevailed in women with asthma.

When comparing emotional frustration, it has been revealed that depression prevails among COPD patients, while anxiety frustration predominates among asthma patients ($\chi^2=7.7$, $p<0.05$).

5. Conclusions

The obtained data concerning the presence of psychological features and emotional frustration of COPD and asthma patients indicate that it is necessary to consider the creation of programs involving individual psychological rehabilitation in order to improve patients' quality of life.

Conflict of interest

None declared.

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