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Psychosocial problems of patients with bronchial asthma

Bronchial asthma is a disease of frequent occurrence since it affects 7–10% of the population (5). Despite the significant dynamics of contemporary medical achievements, asthma remains a serious clinical, social and economic problem. The increase in bronchial asthma incidence as well as of the frequency of deaths due to the illness is noticed. The research shows that nowadays, asthma prevalence is twice as frequent as it was 20 years ago and therefore asthma is more often said to be a social disease. Asthma saves no one, regardless of age or sex. It is found that asthma occurs from infancy until senility.

The consensus on the exact definition of asthma has not been reached. It is usually assumed that bronchial asthma is a chronic airway inflammation characterized by paroxysmal dyspnoea (inspiration, and especially expiration are greatly disfunctional), whistling rales and cough resulting from bronchospasm, bronchial epithelium oedema, and increased amount of mucous secretion in bronchial lumen (7). The course of asthma is characterized by disease aggravation and remission. Exacerbation of the disease means unexpected dyspnoea attacks with a varied degree of intensification, which may sometimes be life-threatening.

Psychosocial problems of patients with bronchial asthma result mainly from the fact that it is a severe, chronic and life-threatening illness. The chronic character of the disease causes numerous problems and changes the way one functions at many levels of life and the mechanisms of psychological regulation (3). At the personality level, emotional alteration like increase of anxiety, depressive states as well as intensification of emotions and aggressive behaviour is mostly observed. Chronic and serious illness disturbs man's activity in a society since it may be a limiting factor when playing their social roles. The disease, becoming one of the specific man's roles in a society, may negatively affect tackling other life tasks, beginning with those connected with sex and age and ending with occupational, family and social roles (13). An illness of one of the family members changes the existing network of relationships and obligations. Various responsibilities, previously borne by the sick person, are taken over by other family members. For the nearest relatives, such a situation may be too difficult to deal with leading to the patient's unpleasant feeling of loss of prestige and their place. The problems in the patient's family may also result from deterioration in their material situation. The patient may also encounter some difficulties when playing their occupational role. They are caused by physical ailments, decreased efficiency, fatigability and the periods of absence from work decreasing the satisfaction derived from work and its appreciation by the superiors. Sometimes it is necessary to resign from the professional activity and live on a disability pension. This fact is the causative agent in the feeling of losing the of fundamental values, interests, the social and material status. Chronic diseases reduce general social activity, change interpersonal relations,

give the feeling of inferior psychosocial abilities and decreased satisfaction from contacts with other people (10).

Literature data invite to ask the following question: What, if any, are the psychosocial problems of patients suffering from bronchial asthma and what is their intensification? From the point of view of the clinician and the therapist, other questions may also be asked, e. g.: Does the kind and the intensification of these problems depend on the illness severity and patient's sex? and, Are the psychosocial problems of patients with bronchial asthma specific to them or are they similar to the problems present in other patient groups?

MATERIAL AND METHODS

The research involved 121 patients suffering from bronchial asthma, treated in the Pulmonary Department of Medical University of Lublin. The mean age was 40.6. The illness duration ranged from 5 to 20 years. The group covered 81 female (67%) and 40 male (33%) patients. On the basis of the doctor's diagnosis and preliminary statistical analysis, the patients were divided into two groups: subjects with asthma of a milder course (both, sporadic and chronic but mild asthma) and subjects with asthma of a severe course (chronic and minor as well as chronic and severe asthma). Table 1 presents the distribution of the examined population.

Table 1. The distribution of examined population

Group	Women		Men	
	N	%	N	%
Mild asthma	38	31.4	19	15.7
Severe asthma	43	35.6	21	17.3

An analysis of the psychosocial problems of patients with bronchial asthma was performed basing on the research results of the Handicap Problems Inventory (HPI) of Wright and Rommers, in the elaboration and Polish adaptation of Witkowski (14). HPI is intended for carrying out research on psychosocial difficulties of handicap and chronically ill people. It consists of 280 statements, which make the examined person reveal these psychosocial problems that they notice in one. With the assent of the author of the Polish version, in particular statements the word "disability" was changed into "disease". The inventory allows determining the general level of psychosocial difficulty intensification (the global result) as well as difficulty intensification at four distinctive levels.

Personality level examines the patient's attitude towards the disease and towards oneself, the feeling of the meaning of life and views on the patient's future. Family level analyzes the patients' general feeling and their status in the family, the degree of engagement in family matters, the attitude towards the opposite sex, marriage and sexual life. Social level examines the patient's general feeling among sick and healthy people, the engagement in social contacts, the abilities of spontaneous making contacts with others. Occupational level investigates the patient's attitude towards and engagement in occupational matters, general feeling in the working place, the attitude towards the professional and material achievements.

RESULTS

By the statistical analysis of the results using t-test, the significance of differences between mean values for individual groups of patients with asthma was compared. In the first step of the analysis, the female patient groups with a milder and more severe course of asthma were compared. Differences between these groups regarding the intensity of psychosocial problems were revealed. Women with more serious asthma course are characterized by a significantly higher level of psychosocial problem intensification on the family, social and professional levels (Tab. 2).

Table 2. Mean values (X) and standard deviations (σ) of results for female subjects with mild and severe asthma in the Handicap Problems Inventory (HPI)

Levels	Women with mild asthma		Women with severe asthma		The level of difference significance
	X	σ	X	σ	
Totally	35.18	10.95	42.58	15.63	0.01
Personality	41.15	14.51	48.13	18.06	non-significant
Family	29.68	10.96	36.65	14.60	0.01
Social	32.42	11.71	39.74	15.43	0.02
Occupational	32.28	12.08	41.97	18.93	0.005

Table 3. Mean values (X) and standard deviations (σ) of results for male subjects with mild and severe asthma in the Handicap Problems Inventory (HPI)

Levels	Women with mild asthma		Men with severe asthma		The level of difference significance
	X	σ	X	σ	
Totally	38.21	11.39	43.90	12.50	non-significant
Personality	41.00	12.29	47.71	12.77	non-significant
Family	31.21	11.31	36.76	10.52	non-significant
Social	34.00	9.51	43.04	13.78	0.02
Occupational	37.94	12.43	43.95	17.17	non-significant

Table 4. Mean values (X) and standard deviations (σ) of results obtained for female and male subjects with mild asthma in the Handicap Problems Inventory (HPI)

Levels	Women with mild asthma		Men with severe asthma		The level of difference significance
	X	σ	X	σ	
Totally	35.18	10.95	38.21	11.39	non-significant
Personality	41.15	14.51	41.00	12.29	non-significant
Family	29.68	10.96	31.21	11.31	non-significant
Social	32.42	11.71	34.00	9.51	non-significant
Occupational	32.28	12.08	37.94	12.43	non-significant

Table 5. Mean values (X) and standard deviations (σ) of results obtained for female and male subjects with severe asthma in the Handicap Problems Inventory (HPI)

Levels	Women with severe asthma		Men with severe asthma		The level of difference significance
	X	σ	X	σ	
Totally	42.58	15.63	43.90	12.50	non-significant
Personality	48.13	18.06	47.71	12.77	non-significant
Family	36.65	14.60	36.76	10.52	non-significant
Social	39.74	15.43	43.04	13.78	non-significant
Occupational	41.97	18.93	43.95	17.16	non-significant

Differences in psychosocial problem intensification are not so distinct in the male patient groups with asthma of a milder and more severe course. Only significantly higher intensification of problems at the social level within the group of men with more serious asthma was observed (Tab. 3). In all these groups, most problems are associated with the personality level, and then – with the professional and social level. The smallest number of problems is observed on the family level. Examined subject sex appeared not to be a differentiating variable considering intensification of psychosocial problems of patients with asthma (Tab. 4 and 5).

The results obtained for patients with asthma regarding their psychosocial problems were compared with those for subjects belonging to various groups of people with disabilities. The comparative group consisted of subjects with mental deficiency and with lower than average intellectual development, of the blind and amblyopic people, of the deaf and subjects with hearing impairment, of people with spinal cord injury, with infantile cerebral palsy, with speech disturbances, of those after cardiac infarction, of diabetics as well as of those suffering from tuberculosis and of socially inflexible subjects (quoting Witkowski, 1993, page 23). The psychosocial problem escalation is higher in bronchial asthma patients with particular reference to personality and family levels.

In order to study the acquired statistical data more thoroughly, the content analysis of the most frequently chosen statements was performed.

Table 6. Mean values (X) and standard deviations (σ) of results obtained for subjects from comparative group and these with bronchial asthma

Levels	Comparative group		Bronchial asthma patients		The level of difference significance
	X	σ	X	σ	
Totally	35.3	17.5	39.96	14.15	0.01
Personality	39.0	18.8	48.11	15.52	0.001
Family	28.8	17.6	33.57	12.65,	non-significant
Social	35.6	19.1	33.30	13.71	non-significant
Occupational	36.4	19.7	39.03	16.26	non-significant

CONTENT ANALYSIS OF EXPERIENCED PROBLEMS

The content of problems and difficulties experienced by patients suffering from bronchial asthma is examined in general terms, that is without dividing the subjects into subgroups. The

statements chosen most frequently are to be quoted literally giving the number of the statement and the number of choices expressed as a percentage.

Personality level:

211. I try to behave as if I was healthy. (83)
124. I try to hide my disease. (80)
229. I have to give up many things due to my disease. (75)
84. I try to forget about the fact I am ill. (72)
14. I find it hard to accept the fact I am ill. (71)
129. I am troubled by thoughts of premature death. (70)
41. I think it is better to suffer in silence. (65)
71. I prefer not to talk about my disease with other people. (61)
89. I think it is difficult to face the life. (55)
208. It is easy to hurt my feelings. (52)

Summary:

The examined subjects wish they forgot about the illness, they want to conceal it from others and behave as though the disease did not exist. They find it hard to deal with the problems of everyday life; they also fear for both their health and life.

Family level:

135. I feel guilty as my relatives do so much for me. (68)
256. I am sorry that I am not able to do enough for my family. (60)
186. I feel better with my family than among strangers. (58)
200. I need more affection. (56)
125. I am afraid of my partner taking pity on me. (52)
170. I have a feeling that my family demands too much from me. (48)
275. I am afraid that I will be dependent on my relatives my whole life. (43)
235. I am worried that my family worries very much about the fact I am ill. (40)
100. The duties and difficulties of everyday life make me feel worried. (38)
112. My chances of achieving conjugal bliss are smaller. (35)

Summary:

Patients feel better with their families than in other environments. The family engagement with patients' affairs, however, makes them feel guilty and arouse a need to reciprocate. The subjects worry about the future of their relationships, they are afraid of their partners' compassion and of becoming dependent on them.

Social level:

178. I try to hide my disease from other people. (89)
3. I spend too little time in other people's company. (83)
113. I am afraid that in public places I may become an object of interest. (80)
87. My relations with others are strained. (76)
231. People consider that I am different from them. (71)
278. I am more nervous than others. (66)
148. It seems to me that I am treated as an inferior person. (59)
96. I do not have too many friends. (40)
17. I dislike people having pity on me. (35)
56. I do not feel naturally enough among others. (33)

Summary:

A need to conceal the illness and awkwardness results in patients' making contact with only a few people and in having troubles with spontaneous behaviour. They consider themselves as different, inferior and more nervous.

Occupational level:

97. It will be hard for me to earn my own living. (70)
4. I lose my confidence in my professional abilities. (68)
188. I am afraid of failure at my place of employment due to my disease. (55)
53. As a sick person I have to work harder to achieve success. (52)
101. I dislike being dependent on others when doing my job. (50)
39. I am afraid for further loss of ability to work. (47)
27. I have doubts about my earnings in the future. (45)
153. I am worried about my success in my professional career. (42)
13. I think for the sick it is hard to find a well-paid job (40).
184. I cannot do my job as well as healthy people. (35)

Summary:

The sick lose their confidence in their abilities and their chances of developing a professional career; they are worried about their material future. They are afraid of failure in the place of employment resulting from the fact they are ill.

DISCUSSION

The results revealed that patients suffering from bronchial asthma, both female and male, experience many psychosocial problems. Greater intensification of these problems is observed in the group of subjects with a more severe course of asthma. Due to sufferings, decreasing physical efficiency and all the troubles caused by the illness, the patient finds it hard to accomplish social aims and to complete the tasks compelled by a society. The results of the research indicate, in accordance with other authors' studies, that the feeling of anxiety strengthens in these patients (2). Some patients are affected by depression manifesting itself in some decrease in interests, proneness to weeping, intense dejection and even in suicidal tendencies (1,4). Behaviour changes of aggressive character like vexation, irritation, uncontrolled blaze of anger are sometimes observed (9). Moreover, the research demonstrates that patients lose their self-confidence and the ability to cope with everyday-life challenges. Previous studies showed a disposition to withdrawal as well as reduced sociability of subjects suffering from asthma (6,8,12). Research indicates that such behaviour results from the fact that the patients are ashamed of their illness. The sick person tends to conceal his condition and suffer in solitude, which has a negative effect on social contacts with other people. They seclude themselves from others, become less spontaneous and are less satisfied when meeting another person. The illness is considered as a social stigma, as something they should be embarrassed about and that makes them feel inferior.

The results also reveal that patients suffering from asthma have many problems with performing their routine professional duties. As indicated by the content analysis of this issue, the sick person is mostly afraid for their professional and material future. In addition, they lose confidence in their professional abilities and in achieving success in this field. Contrary to the previous report (11), the present studies show that the relatively minor problems are experienced by patients with asthma at the family level. It is a good indicator of family solicitude to create an atmosphere, which is friendly to the sick person. The patients feel, however, guilty about becoming a burden to their families, they are also afraid of losing their autonomy and their independence in a relationship. The patient's personality problems rather than family ones are more evident in such a situation.

A comparative analysis of both the group of patients suffering from asthma and that consisting of people with various disabilities revealed that the subjects with asthma experience more psychosocial problems, especially at the personality level. These differences may result from the specific characteristics of asthma, that is the presence of remission and aggravation of the disease, which are beyond the patient's control. Sudden changes of health state (i.e., paroxysmal dyspnoea) may cause anxiety about one's own life and produce a feeling of losing control. The patient loses the capacity to recognise their abilities and limitations, they do not have a true perspective on a further course of disease and its consequences.

CONCLUSIONS

Summarising the results, it can be concluded that the medical treatment of a patient with bronchial asthma requires that all aspects of their activity

should be regarded. The study showed that in patients with asthma not only is somatic state disturbed but also their activity at personality, social and occupational levels. Apart from the classical medical care, the psychological treatment and patients' education are also needed with great emphasis put on the problem of illness acceptance. The research revealed that patients are embarrassed about their disease, therefore isolating themselves from society. Illness recognition and having a knowledge of their condition give the patient a stronger feeling of being in charge of their somatic state, protecting them from negative personality changes and providing them with a better chance of leading normal life. The ability to manage an illness also enhances a chance of long and successful professional activity of patients with asthma. The comprehensive care of the sick defends them against the negative disease outcome, which may have a secondary harmful effect on treatment and decrease its efficiency.

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SUMMARY

The objective of the study was the analysis of psychosocial problems of subjects afflicted with bronchial asthma. The survey comprised a group of 121 patients treated in the Pulmonary Department of Medical University of Lublin. The type and intensity of problems

was determined on the basis of Handicap Problems Inventory of Wright and Rommers. In comparison with various groups of people with disabilities, patients with asthma are affected with more psychosocial problems. They feel ashamed of their illness and try to conceal it from others. It results in rare and rather not very spontaneous contacts with other people and in the feeling of inferiority. They act best in family feeling, however, guilty towards them. They worry about the future of the relationship, loss of autonomy and independence. The patients lose confidence in their chances for professional career feeling afraid for their financial future. Basing on the results, it can be ascertained that the treatment of the bronchial asthma patients requires that their psychosocial problems should be taken into account. Then, the therapeutic effects will be more effective.

Psychospołeczne problemy osób chorych na astmę oskrzelową

Przedmiotem badawczym pracy była analiza psychospołecznych problemów osób chorych na astmę oskrzelową. Badania przeprowadzono wśród 121 losowo wybranych chorych, leczonych ambulatoryjnie i hospitalizowanych w Klinice Chorób Płuc i Gruźlicy Akademii Medycznej w Lublinie. Rodzaj i poziom nasilenia psychospołecznych problemów osób badanych określono przy użyciu Inwentarza HPI Wrighta i Rommersa. W porównaniu z innymi grupami niepełnosprawności u osób chorych na astmę występuje więcej problemów psychospołecznych. Istotnie więcej problemów pojawia się u osób z ciężkim przebiegiem choroby. Badani wstydzą się swojej choroby i starają się ukryć ją przed innymi. Nawiązują przez to niewiele kontaktów z ludźmi. W kontaktach z innymi są mało spontaniczni i czują się gorsi. Najlepiej funkcjonują w środowisku rodzinnym, odczuwają jednak poczucie winy w stosunku do najbliższych. Martwią się o przyszłość związku, utratę autonomii i niezależności. Chorzy tracą zaufanie do swoich możliwości i nie widzą szans zawodowych, obawiają się o swoją przyszłość materialną. Na podstawie uzyskanych wyników badań stwierdzić można, że leczenie chorego na astmę oskrzelową wymaga uwzględnienia pojawiających się często problemów w funkcjonowaniu psychospołecznym. Efekty podejmowanych działań terapeutycznych będą wtedy skuteczniejsze.