



## Fusion of Vital and Social Fears as a Response to Disease

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### Abstract

Pulmonary tuberculosis is both a biological and a social threat to humans. In response, vital and social fears develop. A person with tuberculosis develops a whole range of complex emotions. Vital and social fears are closely interrelated and form a fusion of negative emotions. The fear of infecting other people, dying from illness, long-term treatment, problems with subsequent employment correlate with the feeling of shame for the disease and the oppressed state due to the long stay in the hospital.

**Keywords:** Pulmonary tuberculosis; Clinical characteristics of patients; Biological threat; Social threat; Author's questionnaire; Fear; Multivariate analysis; Interrelation of emotions

### Annotation

With the help of a specially developed by the author questionnaire revealed the emotions of a sick person on the biological and social threat-pulmonary tuberculosis. Emotions are closely interrelated both in direct and inverse relationship. Emotions of a sick person should be taken into account when working with him.

Emotion is a special kind of mental processes that express a person's attitude to the world and to himself [1]. Emotions are the link between reality and human expectations [2]. If the real situation coincides with expectations, then there are positive emotions. If the real situation does not coincide with expectations, negative emotions arise [3]. People have different needs. It is with the help of emotions that a person evaluates the significance of different situations for him [4]. Positive emotions a person seeks to extend. From negative emotions a person seeks to get rid of. Therefore, emotions direct human behavior, change it [5].

On important events for a person there are strong emotions. Strong emotions also arise on events that threaten the life or well-being of the individual [6]. The danger may be real or fictitious. Emotions in a fictional danger are as strong as in a real one [7].

Tuberculosis disease has been known since ancient times [8]. It has accompanied humanity for centuries. Before the discovery of antibiotics, there was no treatment for tuberculosis. Enhanced nutrition and fresh air were used as treatment [9]. Many patients died at a young age. Therefore, the word tuberculosis causes fear in patients. Patients do not have reliable information about the course of this disease in modern conditions [10]. They cannot assess the real danger of the disease. They have read or heard that this disease is deadly.

In addition, patients with tuberculosis cannot work. They are disabled. When a person loses his job, he loses his social status. Because of the fear of infection, members of society avoid the patient with tuberculosis. He finds himself in social isolation. Therefore, patients with tuberculosis develop a whole alloy of negative emotions.

The aim of the study was to study the alloy of emotions in patients with tuberculosis.

### Object and Methods of Research

A survey of 100 patients with pulmonary tuberculosis, 62 men and 38 women aged 22 to 56 years, undergoing inpatient treatment at the Samara regional tuberculosis hospital was conducted.

The patients were taken by the method of continuous sampling. All of them were residents of the Samara region. They suffered from pulmonary tuberculosis. The diagnosis was made on the basis of clinical, radiological, laboratory and functional studies.

To study the fusion of emotion, the author has developed a special questionnaire. Some questions are aimed at identifying emotions caused by a life-threatening disease.

**Table 1:** Some social characteristics of the examined patients with pulmonary tuberculosis.

Indicator	Percentage of men % of	Percentage % of women
Secondary education	40.0	33.3
Vocational education	60.0	60.0
Alcohol abuse	53.3	13.3
Smoking more than 10 years	100.0	46.6
Has a room in a communal apartment	20.0	33.3
It has a private house with no amenities	26.6	20.0
It has a separate apartment with facilities	46.6	46.6
Has no means of subsistence	53.3	46.6
Income below the subsistence level	40.0	53.3
The disease began and proceeded in prison	46.6	20.0
Do not receive emotional support from family members, relatives and friends	66.6	60.0
Do not receive financial support from family members, relatives and friends	66.6	53.3

1. "I think my disease is incurable,"
2. "I'm afraid I've been prescribed a lot of medication,"
3. "I'm afraid the drugs have a lot of side effects,"
4. "I'm afraid I don't have the patience to finish the treatment,"
5. "I'm afraid to die early,"
6. "Long-term presence in the hospital depresses me").

Life-threatening disease causes various kinds of fears. These are vital fears.

Other issues are aimed at identifying emotions associated with social exclusion, reduction of social and material status.

1. "I fear my relatives will turn away from me,"
2. "I'm afraid society doesn't need me,"
3. "I try to hide from my loved ones that I have tuberculosis,"
4. "I'm ashamed of my disease,"
5. "I'm afraid to infect others,"
6. "I'm afraid to infect loved ones,"
7. "I'm afraid they'll see me near the TB hospital,"
8. "I'm afraid I'm going to have trouble finding a job,"
9. "I am afraid that at work they will learn about my disease,"
10. "I'm afraid the disease will affect my performance,"
11. "I can't make a career."

The disease leads to social isolation, loss of work, family. Social interaction is disrupted. Sick people are afraid of it. These are social fears associated with the disease.

Each Respondent confirmed in writing their consent to participate in the study.

The developed questionnaire is based on the Respondent's self-assessment of certain emotions. The emotions expressed in the claims. Each statement has a scale on which the Respondent marks his position. Then the answers with the help of a special key are translated into quantitative scores. Then they are processed according to standard statistical methods. A month later, the survey was repeated

in 30% of respondents. There were no discrepancies in the results.

## Obtained Result

In patients with infiltrative pulmonary tuberculosis disintegration of pulmonary tissue was 76%. All patients were allocated a contagion in the environment. They were really dangerous to others.

In patients with fibrous-cavernous pulmonary tuberculosis, *Mycobacterium* excretion was 100%. They were all dangerous to others, 78% were disabled. Multiple drug resistance was detected in 15% of patients. I.e. they needed special treatment. At the same time, they infect the surrounding strains of mycobacteria resistant to the main drugs.

In all examined, the disease was indeed a threat to life. And all the research methods proved it. The disease was a serious threat to vital. At the same time, they were a real threat to others. They could not only infect mycobacteria, but also infect strains resistant to drugs. They are a serious social threat.

Thus, tuberculosis is indeed a vital and social threat to both sick people and members of society.

Respondents' answers to the questionnaire on the emotions associated with the disease are presented in Table 2.

The highest scores showed the statements: I'm afraid to infect others; I'm afraid to infect loved ones; prolonged stay in the hospital depresses me; I'm afraid that the disease will affect my performance.

Pearson correlation analysis was carried out was a statistically significant positive and negative correlation. A direct correlation was observed between the fears expressed in the statements: "I think my disease is incurable" and "I'm afraid that the drugs have many side effects" ( $r=0.394$ ;  $p=0.005$ ); "I'm afraid that relatives and friends will turn away from me" and "I'm afraid to die early" ( $r=0.383$ ;  $p=0.006$ ); "I'm afraid that the drugs have many side effects" and "I'm afraid that I do not have enough patience to bring to the end of treatment" ( $r=0.384$ ;  $p=0.003$ ); "I am afraid that the drugs have many side effects" and "Prolonged hospital stay depresses me" ( $r=0.415$ ;  $p=0.001$ ); "I try to hide from loved ones that I have tuberculosis" and "I am afraid that at work they will learn about my disease" ( $r=0.656$ ;  $p=0.0001$ ); "I am ashamed of my disease" and "I am afraid that I will be seen near the tuberculosis hospital" ( $r=0.396$ ;  $p=0.004$ ).

Various kinds of fears due to the disease are correlated with

**Table 2:** Respondents answers to the questionnaire on the emotions associated with the disease are presented in this table. The answers are translated into scores.

Fear indicators in points	
Approval	Points
I think my condition is incurable	33,68
I'm afraid my relatives will turn away from me	10,24
I'm afraid society doesn't need me	21,40
I'm afraid I've been prescribed a lot of drugs	20,72
I'm afraid the drugs have a lot of side effects	53,90
I try to hide from relatives that I am sick with tuberculosis	28,50
I am ashamed of my illness	47,60
I'm afraid of infecting the other	76,18
I'm afraid I'll be seen outside the tuberculosis hospital	20,66
I'm afraid I don't have the patience to finish treatment	27,32
I'm afraid I'll have trouble finding a job	52,60
I'm afraid the office will find out about my condition	22,32
I'm afraid to infect home	74,54
I'm afraid to die	35,64
I'm afraid the disease will affect my performance	61,88
I can't make a career	57,98
Long stay in the hospital depresses me	71,70

negative feelings of shame and oppression from the treatment.

The inverse significant correlation was observed between the fears expressed in the statements: "I am afraid that relatives and friends will turn away from me" and "I am afraid that I will have problems with employment" ( $r=0.375$ ;  $p=0.007$ ).

Thus, the study revealed a correlation between fears and other negative emotions in the disease. Fears are caused by a disease that threatens life and leads to disability. Fears are associated with social isolation of patients.

In addition to fears, patients with tuberculosis have other negative emotions. All emotions are connected with each other as a direct and feedback. It turns out a fusion of negative emotions caused by the disease.

## Discussion of the Results

The highest scores are for fear of infecting others. The analysis of fear shows the origins of this fear. The doctor fills in the medical history and finds out the life history of a sick person. The patient with pulmonary tuberculosis is in real isolation. Most of the patients do not visit relatives and friends. Most often, the patient does not bring food. Most patients do not receive emotional and financial support from family members and friends. Therefore, the news of the infection of someone from the environment is a sentence for the patient. His isolation will be final. And the customs and customs in the environment in which the patient lives with tuberculosis, described in Table 1, do not exclude the possibility of physical violence with the source of infection. Therefore, fear of infecting others means not caring about loved ones and others, and the fear of complete isolation and physical violence.

Fear of infecting loved ones is second. Living with a TB patient is seen not just as "contact" but as excessive contact. Contact persons

twice a year should take special drugs for prevention. They are hard to tolerate and have side effects. The patient must comply with the regulated sanitary rules for cleaning the room, washing dishes and processing of allocated sputum. And even compliance with these rules does not guarantee that family members will not get tuberculosis. The appearance of another patient with tuberculosis in the family will require additional funds for treatment, nutrition. Pulmonary tuberculosis leads to disability and loss of work and income. According to the study of the social status of tuberculosis patients, 40% of men and 53% of women have an income below the subsistence level. The disease of another family member will lead to increased financial difficulties. Perhaps the development of behavioral aggression by a sick family member, various kinds of revenge. Sometimes a patient with tuberculosis is kicked out of the house, commit physical violence against him. If a patient with tuberculosis has become the cause of the disease in a loved one, he cannot count on care, purchase of products, medicines. Relations escalate. It scares sick people.

The statement "Long-term presence in the hospital gives me the creeps" is aimed to identify depressive disorders in connection with disease and treatment. A person in a depressed state evaluates the prospects of treatment as low, not sure about the possibility of returning to his former life and work.

"I think my disease is incurable" and "I'm afraid that drugs have many side effects" are directly correlated ( $r=0.394$ ;  $p=0.005$ ). Biological cure for tuberculosis is impossible. The cure is only clinical. For clinical cure need to undergo prolonged courses of treatment over many months. At the same time, from four to six drugs are prescribed, which really have negative side effects. These are vital fears.

There was a direct correlation between the fears of "I'm afraid that relatives and friends will turn away from me" and "I'm afraid to die early" ( $r=0.383$ ;  $p=0.006$ ). In order not to die from tuberculosis, you need a long-term inpatient treatment. Treatment for many months in isolation from home and family requires high discipline, inner attitude. A sick person needs emotional support. In order to buy some medicines and food, you need financial assistance of relatives and friends. Therefore, it is very difficult for a patient to go through the course of treatment without emotional and financial assistance, and the fear of death from tuberculosis is quite real for them. It's a fusion of vital and social fear.

The next direct relationship between the fears of "I'm afraid I won't have the patience to finish the treatment" and "I'm afraid that the drugs have a lot of side effects" ( $r=0.384$ ;  $p=0.003$ ). Treatment of tuberculosis lasts for many months. The patient is in the hospital, separated from family and friends. Many are oppressed by the hospital environment, hospital food. There are up to 10 people in hospital wards. These are people with household habits and requirements. They can go to bed and Wake up at different times. There are problems with hygienic washing, taking a shower. Chambers are not always ventilated; access to fresh air is difficult. Since a large proportion of TB patients were previously in prison, prison customs and customs continue to be maintained in the hospital ward. And if a person has not been in prison before, it is extremely difficult for him to get used to such regulations. In addition, anti-TB drugs do have negative side effects. Therefore, the patient's fears expressed in this correlation are quite understandable. Etto alloy vital and social fear.

"I am afraid that the drugs have many side effects "and" prolonged hospital stay depresses me " ( $r=0.415$ ;  $p=0.001$ ). These

fears partly intersect with the above. Patients experience pain in the right hypochondrium, nausea, heartburn, itching, and paresthesia. They may have impaired hearing and vision. It's all the side effects of TB treatment. And this treatment lasts for many months in the hospital, in isolation from the family and home conditions. Patients are oppressed by hospital food, hospital conditions, and stay in uncomfortable conditions. It's a fusion of vital and social fear.

There was a direct relationship between the fears of "I try to hide from loved ones that I have tuberculosis" and "I'm afraid that at work they will learn about my disease" ( $r=0.656$ ;  $p=0.0001$ ). Fusion of these fears is understandable. Tuberculosis patients try to hide their disease from relatives. Tuberculosis leads to social isolation, loss of work and, consequently, financial and social status. Patients need material and emotional support. Relatives can give such support if the relationship in the family is harmonious. If the family is disharmonious, the patient becomes a burden. With a low cultural and intellectual level of the members of the family cannot just demonstrate it, but to say out loud. Tuberculosis patients may experience verbal and physical aggression from their family members. With the loss of work relationships in the family become even more tense. Therefore, they try to hide the fact of their illness. It's a fusion of social fears.

These fears are linked by a direct correlation of "I'm ashamed of my disease" and "I'm afraid I'll be seen near a tuberculosis hospital" ( $r=0.396$ ;  $p=0.004$ ). Tuberculosis patients find themselves in social isolation. They are avoided by family members, relatives and others for fear of infection. In addition to isolation, patients may experience verbal and physical aggression from family members, neighbors, persons from the environment.

Patients need long-term treatment. They need moral and material assistance and support, otherwise they will not be able to complete the course of treatment. They are forced to ask for help, the money of their relatives and friends. At the same time, they can be refused in a sharp and rough form.

Because of the social danger to others, they become disabled and lose their material, professional and social status. Tuberculosis disease is a certain stigma for the patient.

Tuberculosis patients are aware of the possibility of social isolation and try to hide the fact of pulmonary tuberculosis. It is a fusion of vital and social fears.

The inverse significant correlation was observed between the fears presented in the statements: "I am afraid that relatives and friends will turn away from me" and "I am afraid that I will have problems with employment" ( $r=0.375$ ;  $p=0.007$ ). A person without a job has difficulties in dealing with relatives. People with low social status may have verbal and behavioral aggression. The more time a person does not work, the more problems he has with relatives and friends.

Long-term treatment requires money. A person without a job can only rely on the help of relatives and family members. If the

relationship in the family disharmonious, the need for treatment and purchase of drugs becomes a big and intractable problem. Often patients with tuberculosis, weak physically, cannot stand up for themselves, experiencing aggression from family members. This has a negative impact on the treatment process. Lack of necessary medicines, emotional support and various fears complicate the treatment process. The mood of a sick person, his infusion to heal, the discipline of treatment, and the accuracy of the doctor's appointments are important factors that affect the outcome of the disease. It's a fusion of social fears.

The study showed that people with tuberculosis experience a lot of negative emotions. These emotions are closely interconnected. A fusion of negative emotions is formed.

Fears of tuberculosis patients are vital and social. Vital associated with the threat of death from disease. Social are associated with the threat of social exclusion and disruption of social interaction. And these fears are closely linked. Some vital and social fears are also linked.

Therefore, treatment of tuberculosis patients should be accompanied by psychological and social correction. All fears of tuberculosis patients are so interconnected that it is necessary to work not with a certain fear, but with a set of fears, their inseparable alloy.

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