

# The role of compliance in the treatment of tuberculosis patients

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**Abstract:** Compliance is an essential factor in the success of treatment for tuberculosis patients receiving inpatient care, as the attitude towards therapy, confidence in the attending doctor, and overall emotional state directly affect the quality and rate of recovery. The question arises about the need for psychological support of the treatment process in phthisiology, which, according to the results obtained, is virtually absent. It seems that the key role in such interaction should be played by a medical (clinical) psychologist, and the key determinants of the focus of his work will be increasing patient compliance and correcting stigmatizing manifestations in doctors.

**Keywords:** tuberculosis patients, compliance, therapy, phthisiologist, medical recommendation

**Introduction.** The degree to which the patient fulfills medical recommendations for taking medications, observing certain restrictions and changing lifestyle corresponds to the concept of adherence to treatment, the importance of which has increased greatly. Expressed commitment to treatment is manifested by cooperation between the doctor and the patient, in which it is possible to freely discuss all the difficulties of treatment, doubts and difficulties that arise in the patient.

In medicine, since the time of Hippocrates, there has been a long tradition of paying attention to the interaction between doctors and patients. In particular, the adherence of patients to the recommendations given by doctors has been a focus. Studies have shown that around a third of hospital patients and two-thirds of outpatient patients do not regularly follow or even take prescribed therapies. This issue has become even more important in the last third of the 20th century due to the increasing cost of medical services and the institutionalization of ethical and legal standards for treatment and diagnosis [12, 33, 45]. "Adherence to therapy" can be defined as the patient's behavior related to treatment, including taking prescribed medications, following a diet, and performing recommended physical exercises

during rehabilitation. "Compliance" refers to the patient's agreement with treatment, cooperation with the doctor, and fulfillment of therapy requirements. It also includes precise and conscious adherence to the doctor's recommendations. A characteristic feature of providing medical services for tuberculosis is the need for long-term and, in most cases, repeated treatment. This makes the issue of patient adherence to medical recommendations, including medication regimens, particularly relevant [15, 19, 27].

Studies on the compliance of tuberculosis patients often cite the opinions of phthisiologists, but they do not take into account the views of patients themselves or general practitioners. However, the opinion of patients on the quality of treatment is becoming increasingly important. WHO pays special attention to this assessment when characterizing an adequate quality of medical service.

**Purpose:** The study consisted of analyzing the adherence of patients with tuberculosis.

**Materials and methods:** Taking into account the requirements accepted in the sociology of medicine [2, 8, 38], questionnaires were compiled, with the help of which an anonymous survey of 674 tuberculosis patients (continuous nested samples), 84 TB doctors (method of the main array), 211 general practitioners (continuous nested samples) was conducted. There were 591 patients (86.5%) under 60 years of age, older - 83 (13.5%); there were 512 men (75.9%), 162 women (24.1%); 579 (86%) had secondary and secondary specialized education, incomplete higher and higher - 95 (14%) people. 63 phthisiologist worked in hospitals, 21 - in dispensaries; 23 people had less than 10 years of work experience; 10 years and more - 61. Among the general practitioners of the general somatic network, 85 people had less than 10 years of work experience; 126 had 10 years or more.

**Results and discussion:** 86.5% of tuberculosis patients decided that they fully comply with medical recommendations; another 10.5% believed that they partially comply. Only 1.7% of patients answered that they practically do not comply with medical recommendations, and the remaining 1.3% found it difficult to answer. No reliable influence of age, gender, and educational factors on the distribution of answers was found. Thus, if we focus solely on self-assessments, then almost all tuberculosis patients (97%) can be considered compliant patients.

However, the opinions of phthisiologists about compliance with medical recommendations by tuberculosis patients were different: only a few specialists (8.3%) believed that almost all patients comply with medical recommendations; 55.4% of doctors believed that about 50% of patients are compliant, and 33.8% classified 20-30% of patients as such; 5.8% of doctors thought that only a few patients or no one at all followed medical recommendations (the remaining 1.5% of specialists found it difficult to answer this question). The opinions of general somatic

network therapists about tuberculosis patients' compliance with medical recommendations were even more pessimistic: also only a few doctors (3,9%) believed that almost all patients followed medical recommendations; a third (31,8%) of doctors classified about 50% of patients as compliant, and another third (33,8%) considered 20-30% to be so; 14,3% of general somatic network therapists generally answered that only a few or no one followed medical recommendations (the remaining 7,3% found it difficult to give an assessment).

Negative assessments of specialists (both phthisiologists and general practitioners) of compliance of patients with tuberculosis were also reflected in their answers to other questions in the questionnaires. In particular, TB doctors, when answering the question about the difficulties they experience in treating specialized patients, most often indicated the latter's lack of discipline and violations of the regime (58% of phthisiologists), as well as their antisocial behavior. It is noteworthy that other difficulties were highlighted 2-3 times less often (the presence of concomitant pathology was named by 47,3%; frequent side effects of drugs - 17,2%; lack of effective drugs - 12%; several answers could be given to this question, as well as to the following ones). Among the reasons for the ineffectiveness of chemotherapy courses, 78,4% of phthisiologist named the antisocial behavior of patients; 58,5% - low adherence to treatment (drug resistance was identified by 85,9%; advanced tuberculosis process - 71,9%). An asocial lifestyle by patients and their low adherence to treatment were also named by phthisiatricians as the main reasons for tuberculosis relapses - this point of view was expressed by 65,9 and 41,2% of specialists, respectively (among other, most common reasons, there was low material income of a significant part of the population - 59,3%; psychosocial stress - 46,5%; unsatisfactory working and living conditions - 42,2%; lack of phthisiatric alertness among general medical network doctors - 26,5%; the presence of drug resistance - 26,7%; low resistance of many people's organisms - 31,3%; insufficient interaction between anti-tuberculosis and general medical services - 23,1%; insufficient interaction between civilian and penitentiary anti-tuberculosis services - 25%; low quality of anti-tuberculosis treatment - 12,6%).

As the main causes of tuberculosis relapse, 50,1% of general practitioners identified an asocial lifestyle by this group of patients and 54,2% identified their low adherence to treatment (among other, most common causes, they, in turn, identified low material income of a significant part of the population - 73,6%; unsatisfactory working and living conditions - 47,3%; psychosocial stress - 43,1%; the presence of drug resistance - 22,1%; low resistance of many people's organisms - 24%; insufficient interaction between civilian and penitentiary anti-tuberculosis services - 28,5%; low quality of anti-tuberculosis treatment - 11%).

Conclusion: The study conducted allows us to draw the following main

conclusions: Phthisiologists and general practitioners assess the compliance of tuberculosis patients as extremely low, which generally corresponds to assessments found in the medical literature. However, this approach largely contributes to the provision of medical services for this category of patients in a formal manner, since, according to social psychology, even in the case of a supposed failure (e.g., insufficiently effective treatment), less effort is often made due to subconscious defenses at work. If not all efforts are made, the failure can be explained by the fact that not all possible measures were taken. Then, the positive self-image would suffer less, especially since there is a "wonderful" opportunity to explain the failure with external factors - patients are asocial and have a low adherence to treatment. Also, it is worth noting the opposing assessments of doctors and patients regarding the latter's adherence to treatment. This indicates an ineffective interaction in the doctor-patient relationship, which negatively impacts the results of treatment and rehabilitation as a whole.

The question arises about the need for psychological support during the treatment process in phthisiology, which, according to the results, is practically non-existent. It seems that a medical (clinical) psychologist should play a key role in this interaction, focusing on increasing patient compliance and addressing stigmatizing attitudes among doctors.

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