



## PSYCHOLOGICAL BALANCE OF PATIENT WITH INFECTIOUS DISEASE IN CLINICAL SETTINGS

Diana Radkova<sup>1</sup>, Ivanka Boncheva<sup>2</sup>

1) Department of Infectious Diseases, Faculty of Public Health, Medical University - Varna

2) Department of Psychiatry and Medical Psychology, Faculty of Public Health, Medical University – Varna

### SUMMARY:

In various fields of medicine detailed studies of psychological balance, profiles and coping strategies are being conducted. The multidisciplinary character proves that the medical care can be improved by paying more attention to the psychological aspects of the patient's clinical assessment. Researches about the psychological problems of infectious diseases haven't been published yet in Bulgarian scientific journals.

**Purpose:** To explore the parameters in the experience of patients, divided in three groups of infectious diseases, to examine the experience of the disease and to ascertain their impact on the treatment in the light of the trifocal therapy.

**Material/Methods:** Include 90 patients, treated at the Clinic of Infectious Diseases, University Hospital St. Marina during 2013-2014. The study was conducted using a personally made questionnaire based on the balance model of N. Peseshkian, 1987.

**Results:** In the areas of "body", "action", "contacts", "fantasy/future" the patients from the three groups of infectious diseases / airborne contagious, transmissible and acute viral hepatitis/ had different experience.

**Conclusions:** The data received during the study suggests that the patients from the three groups experience their disease in a different way. Therefore the balance model of N. Peseshkian is an appropriate psychological instrument to examine the specifics of the experience. The results allow a scientifically substantiated search of a differentiated approach to the infectious disease in clinical settings.

**Key words:** Psychological balance, Infectious diseases, Experience,

### INTRODUCTION:

The modern psychosomatic medicine relies primarily on: - evaluation of the psychological and social factors influencing the personal vulnerability, the course and outcome of the disease - a holistic approach to the patients care -integration of the psychotherapy in the treatment and prevention of the diseases. [1]

In various fields of medicine (in cardiovascular diseases, chronic lung diseases, neoplasms, hematological problems, endocrine and skin diseases ) are documented many detailed studies of psychological balance, psycho-

logical profiles, formulating an approach / model of behavior, as well as coping strategies. The psychooncology, psychoneurology, psychodermatology, psychoimmunology are part of the modern psychosomatics' dimensions. Its multidisciplinary character proves that the medical care can be improved by paying more and more attention to the psychological aspects of the clinical assessment of the patient.[2]

In the scientific literature the presence of an infectious disease is discussed as a precondition for abnormal mental functioning of the patient in the meaning of: mental conditions or mental disorders. Experiencing an infectious disease varies greatly- from mood changes, defined as psychological vulnerability, through states of fear, anxiety and crisis to mental disorders with episodes of acute psychosis and severe depressions.

The contagious infectious diseases such as varicella or herpes zoster, associated with fever, pain and skin discomfort, influenza and infectious mononucleosis with its typical clinic impede the physical condition and communication, the social functioning and affect the quality of life. [3]

The acute viral hepatitis with expressed symptoms, the visible changes, the awareness of possible recurrences, as well as the serious consequences (cirrhosis, hepatocellular carcinoma) determine depressive, anxious and cognitive experiences. In addition, the administration of antiviral drugs can lead to delirious manifestations and suicidal attitudes. [4]

The transmissible infectious diseases, from which the monitored Lyme Borreliosis and Marseilles fever, malaria and Q fever, labeled also as emerging diseases, include in their own term difficult predictability, a possible highly debilitating course and problematic treatment. Taking into account the clinical course with skin lesions, cardiovascular, nervous musculoskeletal system damage and the possibility to lead to prolonged inability to work and in severe cases to disability, their experience corresponds with the described mental disorders.[3]

The experience of an infectious disease, the patient's behavior in the psychological aspect, helping or hindering the treatment has not been studied.

According to the interdisciplinary dimensions of the psychosomatic medicine nowadays and the holistic approach in medicine the problem is important and the need for its development is unquestionable. [5]

A new approach and information about psychological problems of the patients made it possible for the physicians to adjust the medical treatment in the aspect of the trifocal therapy. [6]

The above-described infectious diseases – airborne, transmissible and acute viral hepatitis are included in the present study, taking in account their actuality, clinical and social significance.

#### OBJECTIVE:

To explore the parameters in the experience of the infectious disease in the three groups of diseases and to establish their impact on the treatment process.

#### MATERIAL AND METHODS:

90 patients were examined at the Clinic of Infectious Diseases, University Hospital “St. Marina” during the period 2013- 2014, selected by demographic and clinical indicators. The study was conducted using a personal ques-

tionnaire (D. Radkova, 2013, unpublished). [7] The analysis is based on the balance model of N. Peseshkian (1987). [8]

The reliability of the questionnaire was measured by the coefficient of reliability of Cronbach - Cronbach’s  $\alpha$ . The coefficient of reliability of the authors’ questionnaire is 0.440. Statistical data processing is done by calculating the indicators share and assessment of statistical hypotheses by nonparametric methods.

#### RESULTS:

The results in Table. 1. indicate that the women are prevalent -they make two thirds of the respondents. The average age is 38.7, the highest such percentage are representatives of the age group 45-60 years (41.10%).

The main part of the patients belong to the urban population (87.80%) with secondary or special education (61.10%) and family (70.00%).

**Table. 1.** Socio-demographic characteristics

Indicator	Distribution
Gender	Men 32/ 35,60 %
	Women 58/ 64,40 %
Age	Aver. age ( $\pm$ SD) 38,7 y. $\pm$ 12,7 y. (19 – 60)
	19 – 29 y. 27/ 30,00 %
	30 – 44 y. 26/ 28,90 %
	45 – 60 y. 37/ 41,10 %
Residence	City 79/ 87,80 %
	Village 11/ 12,20 %
Education	Primary 10/ 11,10 %
	Secondary/Secondary specialized 55/ 61,10 %
	Higher 25/ 27,80 %
Maritalcohabitation	Single 23/ 25,60 %
	Married 63/ 70,00 %
	Widowed 2/ 2,20 %
	Divorced 2/ 2,20 %

#### Characteristics of the experiences according to the balance model

**Area “BODY”** All patients of the three groups of diseases think about **recovery** with optimism. We found significant differences within the groups in terms of the perception of the body and the patient’s feelings during the disease ( $p < 0.05$ ).

Patients with respiratory contagious infections are the most aggressively disposed towards their body and in the highest rate is the body for them “an enemy” (77.10%), while the patients with acute viral hepatitis “soften” their attitude towards the body. They demonstrate the conditional equivalence of results - the highest percentage perceives their body as a friend.

By patients with transmissible infections a transition to the perception of the body as a friend is observed, despite the prevalence of patients, who perceive the body

as an enemy.

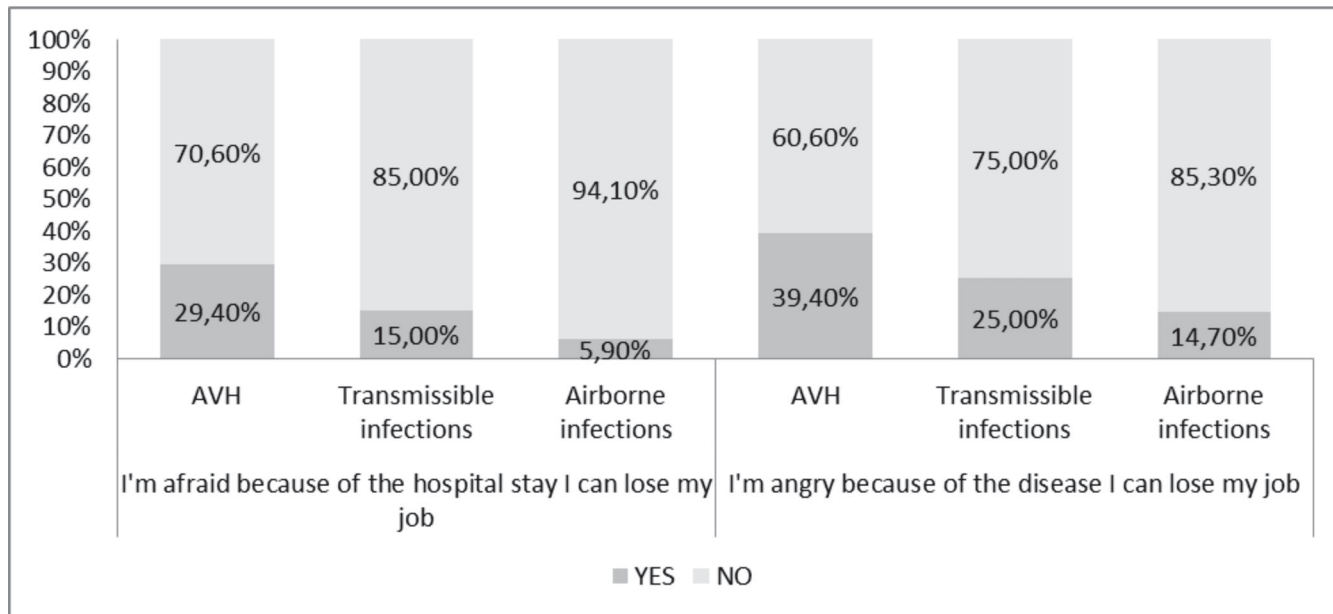
We also found differences in the three groups of diseases in terms of patient’s feelings towards the diagnosis. Patients with respiratory contagious infections respond with mixed feelings between fear and fright. The majority of patients with transmissible infections feel fear, while the majority of patients with acute viral hepatitis have mixed feelings of fear, shock and other feelings of this palette.

**Area “ACTION” Patients** of the three groups of infectious diseases reflect an optimistic attitude towards performance and change in the workplace ( $p > 0.05$ ). At the same time a significant difference between the groups in terms of fear and anger of a possible job loss ( $p < 0.05$ ) is identified. We established a trend towards increasing the percentage of patients who experience fear and resentment of possible job loss in direction respiratory conta-

gious infections, transmissible infections and acute viral hepatitis (Fig. 1).

These results correspond with the patient's view of their hospital stay. For most of them is the hospital stay a negative experience instead of an opportunity for relax.

**Fig. 1.** Comparative analysis of the patients experience to a possible job loss

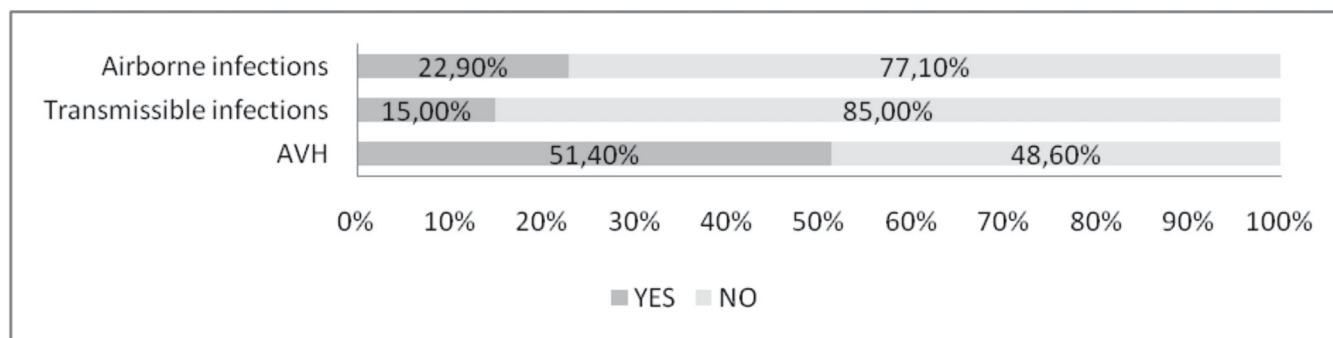


**Area "CONTACTS"** 60-80% of patients in the three groups of diseases feel limited in the ability to carry out their desired contacts. 56-76% react with anger towards the disease. Despite the restriction of personal contacts because of the disease, the patients didn't feel misunderstood by their families.

Significant difference was observed with respect to the patient by avoiding the society ( $p < 0.01$ ). Patients with

transmissible infections in nearly 3/4 of cases dont experience such concerns, while those with respiratory contagious infections despite the prevailing negative responses, establish increase in the percentage of patients who experience avoidance of people in them. Patients with acute viral hepatitis reverse the results and slightly more than half (51.40%) indicate that they think people are afraid of the disease (Fig. 2)

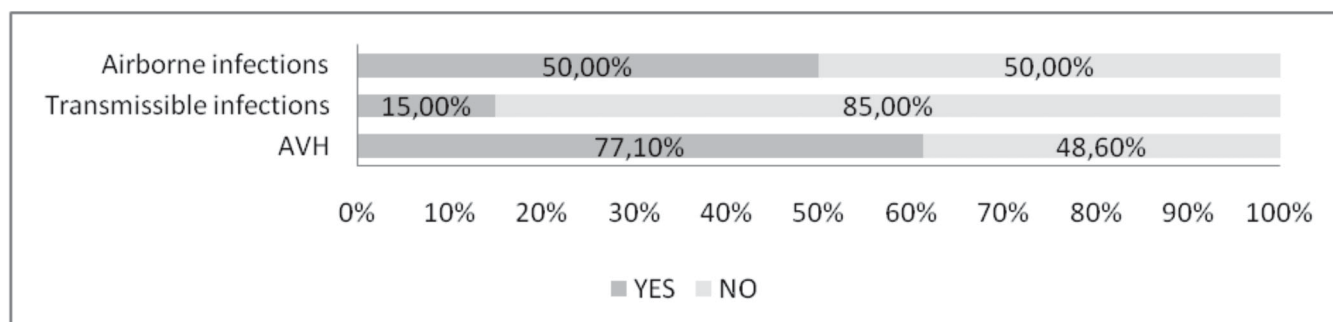
**Fig. 2.** Answers to the statement "I think people are afraid of my disease and shun me"



Significant difference observed in terms of the oppression of the patients in contacts with their relatives ( $p < 0.001$ ). Patients with respiratory contagious infections are generally split (50/50%) on worries about family and

friends, while those with transmissible infections in more than 3/4 of the cases are not worried. 77.10% of patients with acute viral hepatitis have concerns about possible contamination in contact with their relatives (Fig. 3).

**Fig. 3.** Answers to the statement “I worry what will happen to my family because of the contact with my disease”



**Area “FANTASY/FUTURE”** The majority of patients with respiratory contagious infections can not determinate the feeling as contagious patients (75.80% - “other feelings”). In comparison, patients with transmissible infections and acute viral hepatitis feel like physically and mentally weak people (by 35.30% in the group). Despite this difference patients in the three groups said that in the course of their treatment are stable family and friends who keep their faith and hope for a full recovery

#### DISCUSSION:

The way the patients have described their experience during the stay in the clinic shows their psychological attitude to push off (psychological defense mechanism) disease and pests. On a rational level, they accept their illness for granted and are influenced more by the information about the infectivity or the complexity of the disease rather than the emotions that their current status raises.

On an emotional level the picture changes depending on the specific disease. With a rich emotional spectrum react patients with acute viral hepatitis and those with

respiratory contagious infections. This is related mostly to a change in the experience of the body (it is the “enemy”); to the probability of losing their jobs; relative isolation in the clinic and the likelihood to infect someone, mostly relatives. Patients share prevailing anxiety experiences, regarding their social well-being and certain resentment (incl. unspecified, but mostly aggressive feelings) to the disease. It is perceived as something negative not so much in the somatic as in the social and personality-psychological plan.

#### CONCLUSION:

1. The data received during the research suggests that the patients from the three nosological groups experience their disease in a different way.

2. The balance model of N. Peseschkian is an appropriate psychological instrument to decrypt the specifics of the experience.

3. The results allow a scientifically substantiated search of a differentiated approach to the infectious patient in clinical settings.

#### REFERENCES:

1. Fava GA, Sonino N. Psychosomatic medicine. *Int J Clin Pract.* 2010 Jul;64(8):1155-61. [[PubMed](#)] [[CrossRef](#)]
2. Balint M. The doctor, his patient and disease, 1997
3. Klußmann R. Psychosomatische Medizin. Eine Übersicht. Berlin, Heidelberg 1998. [in German]
4. Schmidt F., Schäfer M. Psychische Syndrome im Rahmen der chronischen Hepatitis C Infektion und der antiviralen Therapie. Klinik für Psychiatrie, Psychotherapie und Suchtmedizin, Kliniken Essen-Mitte, 1997. [in German]
5. Bontcheva Iv. Psychological Psychotherapy - vol. 1: Psychotherapeutic competence. *Slavena.* 2013. [in Bulgarian]
6. Natsov I, Tsonev W. Psychiatric and somatic medicine: Advisory and liaison psychiatry. GorexPress, 2002 [in Bulgarian]
7. Radkova D. Questionnaire for self-assessment of psychological balance of 7. hospitalized patients with infectious disease, unpublished, 2014. [in Bulgarian]
8. Peseschkian H . Positive family therapy. Kolor Print, Varna, 1993 [in Bulgarian]

*Please cite this article as:* Radkova D, Boncheva Iv. PSYCHOLOGICAL BALANCE OF PATIENT WITH INFECTIOUS DISEASE IN CLINICAL SETTINGS. *J of IMAB.* 2015 Apr-Jun;21(2):775-778. DOI: <http://dx.doi.org/10.5272/jimab.2015212.775>

Received: 24/09/2014; Published online: 05/05/2015



#### Address for correspondence:

Dr. Diana Radkova, Department of Infectious Diseases, Faculty of Public Health, Medical University - Varna.  
100, Tsar Osvoboditel Bul., Varna, Bulgaria  
e-mail: [d.radkova@mail.bg](mailto:d.radkova@mail.bg)