

## IRRATIONAL BELIEFS AS A FACTOR OF PROFESSIONAL DISADAPTATION OF MEDICAL WORKERS

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### ABSTRACT

**Relevance:** The WHO Bulletin (2000) indicated that between one and five people in the working population have some form of mental health problem at any given time (1). This figure is on the rise and has been proven to affect their employability, work efficiency and quality of life. These problems are also common among healthcare workers, with more than 20% of healthcare workers worldwide experiencing mental health problems (2-4).

Irrational and rational cognitions/beliefs are evaluative cognitive attitudes (structures) consistently associated with distress and psychopathology; at the same time, rational thinking is a determining factor for emotional stability.

**Goals of the study:** 1. To conduct a comparative analysis of irrational attitudes in medical residents as a factor of professional maladaptation at the stage of clinical residency. 2. To formulate recommendations for its timely correction.

**Research Methodology:** The methodology for diagnosing irrational attitudes (Survey of Personal Beliefs, SPB) was developed on the basis of the theory of rational-emotive therapy (RET) by Albert Ellis. The following authors' methods were used: 1) Diagnosis of irrational attitudes - the Survey of Personal Beliefs (SPB) by H. Kassinove; 2) Questionnaire of socio-psychological adaptation, SPA (Test of Personal Adjustment) by K. Rogers, R. Diamond.

**Results:** It was revealed that the majority of medical residents had a high value of irrational attitudes on the scales "Obligation towards oneself" and "Catastrophization". The results of the empirical study revealed significant differences between the two groups of residents using the Statistics 21.0 application package and the Mann-Whitney univariate statistical test.

**Conclusions and Recommendations:** Residents at the stage of training in clinical residency use two irrational (erroneous) attitudes as Obligation to oneself and Catastrophization, which interfere with adequate cognitive processing, and also serve as an additional source of stress for medical workers.

The schemes of psychological support of the residents were developed in order to identify irrational beliefs and timely correct them using psychological techniques (cognitive-behavioral therapy techniques, rational-emotive therapy) at the stage of training in clinical residency.

**Keywords:** irrational attitudes, catastrophization, clinical residents; cognitive distortions; professional adaptation; cognitive behavioral therapy, rational and irrational cognitions/beliefs

## INTRODUCTION

Psychological disorders, often loosely understood in the literature as "distress disorders" (see Watson, 2005), represent the third largest health problem worldwide after cardiovascular disease and cancer (Alonso et al., 2004) [1-7]. It is known that 14% of the working-age population in Europe have had some kind of mood disorder during their lifetime (Alonso et al., 2004), and 20% of the adult working-age population have been found to have some form of mental health problem at any given time (Lahtinen & Lehtinen, 1999) [8]. Irrational and rational cognitions/beliefs are evaluative cognitive structures consistently associated with distress and psychopathology; on the contrary, rational thinking is considered important for emotional stability [4-6].

According to the European Agency for Safety and Health at Work (Greiner, 2005), stress affects at least 28% of workers in the European Union. Employability, employee performance, interpersonal relationships, rates of illness, absenteeism, errors, accidents, and employee turnover are all influenced by employee psychological distress/health status (Simon, Barber, Birnbaum, et al., 2001). However, since we are talking about a competitive and stressful environment, the workplace is currently one of the most insensitive contexts for mental health issues (WHO, 2000).

One of the main approaches that explore the mechanisms of distress and psychopathology in workers is cognitive-behavioral theory (CBT; and Rational Emotive and Cognitive-Behavioral Therapy, REBT; Ellis, 1962) [6]. The CBT/REBT site underlies the importance of the cognitive component, namely the ability of the worker to regulate emotions, expressed in his attitudes, thoughts, perceptions and cognitions relating to himself, others and the world as mechanisms for the occurrence of distress at work and psychopathology.

Irrational beliefs can be quite common in the medical profession, especially in those who experience significant pressure and stress [18-22]. Medical students in the work of the Romanian researcher Irina Crumpei show average results compared to the Romanian standard, except for the need for achievement, where they enter the high score limit ( $M = 14.30$ ,  $SD = 3.33$ ) [23].

However, a more detailed analysis shows that a significant percentage of medical students score high on irrational beliefs on various subscales. About 20% of students demonstrate high and very high irrationality in assessing the self-worth of the individual and the need for approval. 10% show a high to very high need for comfort and share a high level of irrational beliefs about the global evaluation of other people. 30% have a high or very high need for equity. 45% note high and very high rates of general irrationality.

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**Goals of the study:** 1) To conduct a comparative analysis of the study of irrational attitudes and cognitive distortions of clinical residents of the specialties Dermatovenereology and Surgery. 2) To provide schemes for practical psychological work with residents at the stage of training in clinical residency.

## MATERIALS AND METHODS

An empirical study was conducted in March 2023 as a part of professional navigation meetings with clinical residents, during which 70 students studying at Astrakhan State Medical University (Astrakhan, Russia) were interviewed. The study subjects consisted of clinical residents of the specialties Dermatovenereology (35 persons) and Surgery (35 persons). The study of irrational attitudes and professional adaptation was carried out using the authors' methods: 1) Diagnosis of irrational attitudes, SPB H. Kassinove (Russian adaptation by A.K. Kamenyukin, D.V. Kovpak) [13]. The methodology for diagnosing the presence and severity of irrational attitudes is designed to identify these irrational attitudes, to realize their negative impact on emotions, and thereby bring the person closer to a state of emotional well-being; 2) Questionnaire of socio-psychological adaptation, SPA (Test of Personal Adjustment) by K. Rogers, R. Diamond (Russian adaptation by A.K. Osnitsky) [15]. Mathematical and statistical methods of data processing, Mann-Whitney U-criterion were used in the work. The results of the study are presented in figures and tables.

## RESULTS AND DISCUSSION

According to the methodology for diagnosing irrational attitudes (Survey of Personal Beliefs, SPB) by H. Kassinove, the distribution of irrational attitudes among the residents by levels was obtained (Figure 1). The clinical residents of the specialty Dermatovenereology showed high rates, i.e. a pronounced presence of an irrational attitude (less than 30 points) on two scales: catastrophization (24.3%) and obligation to oneself (23.57%). This result means that residents tend to exaggerate how they perceive adverse situations and place high demands on themselves. The idea of duty is manifested in the fact that the person himself owes something to someone. Also, in the residents of this specialty we observed the presence of irrational beliefs (the sum of points from 30 to 45). These irrational attitudes represent rigid cognitive-emotional connections that confront reality and contradict objective conditions, naturally leading to maladjustment of the personality. Accordingly, these settings significantly reduce the quality of life and lead to numerous stresses.

The following irrational attitudes were revealed among the clinical residents of the specialty Surgery (the sum of points from 30 to 45): Obligation to others (32.2%), Self-esteem and rationality of thinking (31.4%).

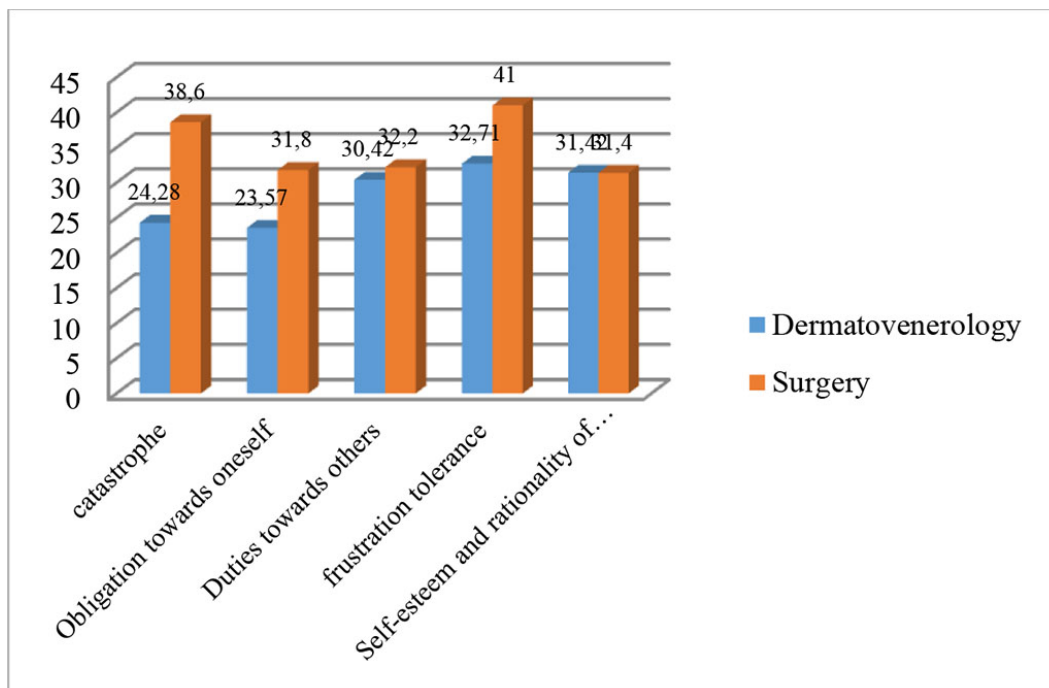


Figure 1. Mean values of irrational attitudes of the residents

As a result of the test interpretation of the data obtained according to the method of socio-psychological adaptation, SPA (Test of Personal Adjustment) by K. Rogers, R. Diamond (Russian, adaptation by A.K. Osnitsky), data were obtained, which are shown in Figure 2.

It was found that residents of the both specialties have average indicators of adaptive abilities - 146.1% and 169.62%, respectively. Two groups of clinical residents also have average values of integral indicators of socio-psychological adaptation, which, of course, is a positive indicator for professional activity and quality of life. However, surgeons have higher adaptation rates than dermatologists.

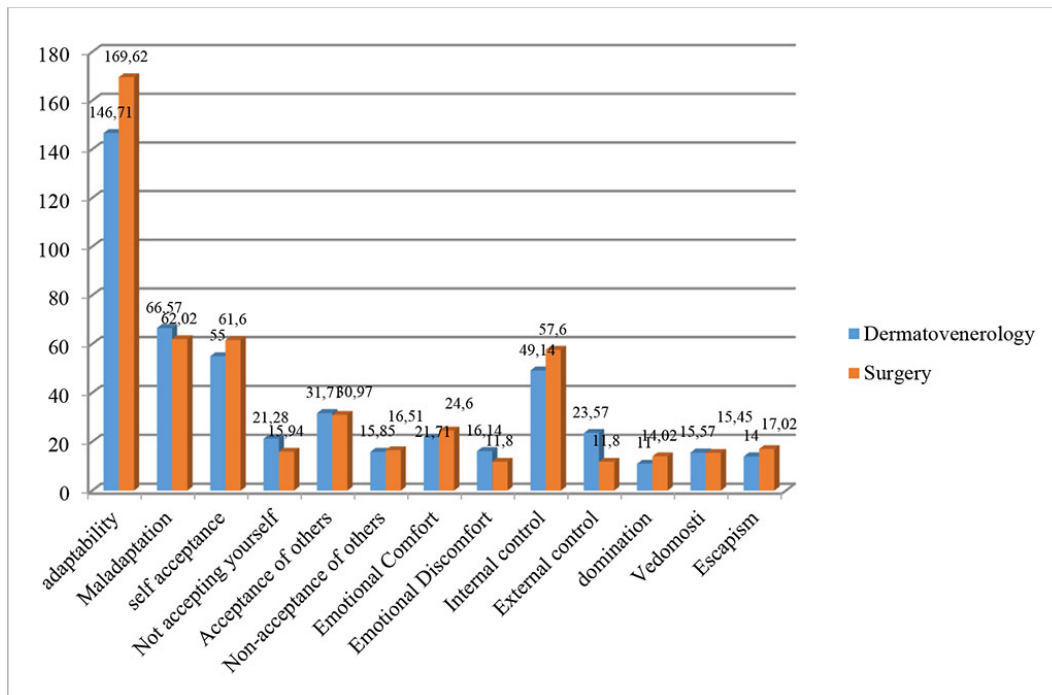


Figure 2. Average values of socio-psychological adaptation among the residents

The next stage of the study included the application of the statistical Mann-Whitney U test (Table 1).

Table 1. Significant differences between the psychological indicators among surgeons and dermatologists

| Psychological indicators | Significance level of differences according to the Mann-Whitney U-test | Differences in statistical significance (p) |
|--------------------------|--|---|
| catastrophization        | 0,016  | p<0,05                                      |
| obligation to oneself    | 0,000  | p<0,05                                      |
| frustration tolerance    | 0,002  | p<0,05                                      |

The analysis of the data shows that the dermatologists are characterized by pronounced presence of irrational attitudes. At a high value of statistical significance, differences in irrational attitudes between these groups were revealed, namely catastrophization (significance level 0.016,  $p \leq 0.05$ ), obligation to oneself (significance level 0.000,  $p \leq 0.05$ ), frustration tolerance (significance level 0.002,  $p \leq 0.05$ ).

Thus, there is a need to correct irrational attitudes in the residents of the specialty Dermatology, the so-called "thinking errors", since thinking directly affects the emotional sphere, stress level, etc. CBT is a short-term, skill-focused treatment aimed at changing maladaptive emotional responses by changing thoughts, changing behavior, or both.

## CONCLUSION

It was revealed that the majority of clinical residents had a high value of irrational attitudes on the scales Obligation to oneself and Catastrophization. The operation of the irrational must inevitably leads to stress, whether acute or chronic, and the irrational Catastrophizing reflects the irrational belief that there are catastrophic events in the world that lie outside any evaluation system. The residents at the stage of training in clinical residency use two irrational (erroneous) attitudes as Obligation to oneself and

Catastrophization, which interfere with adequate cognitive processing, and also serve as an additional source of stress for the medical workers.

The schemes of psychological work with medical residents for the implementation of the program of psychological and pedagogical support at the stage of training in clinical residency were developed.

We described methods for identifying irrational beliefs and their timely psychological correction (techniques of cognitive-behavioral therapy, rational-emotive therapy).

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