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Research Article

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Features of Professional Deformations (Burnout) of Medical Workers Depending on Working Conditions

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Abstract

In the article psychological features of professional activity of medical workers, professionally important qualities that determine professional deformations (burnout) are considered; Indicators such as stress resistance and the importance of its manifestation during the working day, responsibility as a factor in the effectiveness of medical workers; the empathic abilities and differences in the manifestations of all these indices under the conditions of the resuscitation and therapeutic departments of the hospital have been studied.

Keywords: Empathy; Medical workers; Professional activity; Professional deformation (burnout); Professionally important qualities; Responsibility; Stress resistance

Introduction

The continuous development of medical science contributes to the identification of new mechanisms of development of various types of pathology [1,2] and the stages of its formation [3,4]. Detailed studies carried out not only on humans [5,6] but also on various species of animals [7,8], contribute to obtaining a large volume of new knowledge [9,10] in the field of physiology [11,12], pathological physiology [13] and experimental therapy [14,15]. This ensures the detection of new points of influence for the restoration of normal vital activity of the organism [16,17]. The new information obtained has already provided a lot of positive changes in medical practice [18-20]. Their introduction increases the effectiveness of diagnostic manipulations [21,22] and therapeutic procedures [23,24], making the professional activity of medical workers more effective against newer and newer diseases [25]. At the same time, not in all cases so far, medicine is able to exert an effective influence on the pathological process, which often imposes indelible changes on the physician's psyche [26].

Professional activity promotes personal development, personal self-determination, improves professional competencies [27,28]. The peculiarities of the profession can determine the degradation of the personality as a specialist, influencing the profession for the professionally important qualities in the profession, which results in deformations and leads, at least to inefficient activity, as a maximum, to dangerous performance of professional duties [29,30]. In this regard, the relevance of our study is due to the fact that it is the work of medical workers, in comparison with other professions, is characterized by a high functional load and, accordingly, an increased, predisposition to professional disadaptation [31,32]. Adaptation can go into deformation, and the doctor generally becomes indifferent to the pain of others, when according to the mechanism of reactive education, there is an emotional reorganization of the attitude toward death [33,34]. It seems necessary to study the characteristics of the indicators of professional deformation of an individual, the origin of which is in the professional situation of constant interaction with sick people, as well as the mechanisms that contribute to the progression of reforms of professional deformity, its impact on the effectiveness of medical work, and negative effects on social processes in general. In general, in modern literature, professional deformation of the individual is considered in the context of destructive changes in the personalities that negatively affect the productivity of labor and negatively affect the relationships with all participants in this process [35].

In the works of foreign and domestic authors: Abramova GS et al. consider the socio-psychological characteristics of the professional deformation of medical workers in activities. Abramova GS et al. analyze the socio-psychological factors of the professional activity of medical workers, provoking stressful conditions, the emergence of chronic fatigue syndrome and other negative symptoms. In these studies, professional deformation refers to the socio-psychological and mental changes in the personality that arises during the performance of professional activities, and professional deformation is determined by the specifics of the work and its conditions [36].

The work of medical workers with a variety of types of medical activities presupposes various ways of implementing it, great opportunities for the professional, but poses the problem of the specific impact of different types of medical activity on professional development, implementation, the position of the doctor, professional qualities. A Perova and LA Vereshchagin distinguish the professionally important qualities characteristic of medical professionals (IVC): responsibility, ability to make the right decision, empathy, will, etc. In the professional profile of the medical worker ES Romanova [37] indicates responsibility as an important quality for the doctor, as well as indicators of stress resistance, self-control, empathy, etc. [37]. Analysis of modern research shows the general views of authors on key qualities important in the professional fields of the medical worker, such as stress resistance, responsibility, empathy, etc. These qualities in the process of professional development, because of their constant exploitation, begin to transform and cause professional deformation of the individual [38]. When examining stress resistance in general practitioners in the UK (620 h), a high level of anxiety in 41%, depression in 26% of doctors [39].

Specific features of the profession of medical workers affect stress resistance: a high degree of responsibility for patients, and a decrease in the adaptive capacity of the body due to the regime of working with night and day shifts, and, of course, the constant presence in the "field" of suffering, pain, irritation, which are negative emotions, can by the mechanism of emotional contamination go to medical personnel, etc. [26].

Hence, the recommendations to the emotional sphere of medical workers are ambiguous, because, having the empathy necessary in the profession; one must preserve emotional stability as well, and

emotional inhibition, and excessive emotionality, can interfere with the implementation of operational activities, the correct relationship with the patient in each particular situation [40].

Of the numerous studies of the specifics of the professional activity of medical workers, it is possible to single out the main factors that determine the occurrence of professional deformation, which are: high social responsibility, resistance to stress factors, emotional environment.

Purpose of the study

To studies the psychological features of the manifestation of the main professionally important qualities of the personality of medical workers in different working conditions: resuscitation and therapeutic separation of the hospital and causing the emergence of professional deformities.

Materials and Methods

The conducted research was approved by the Local Ethic Committee of the Russian State Social University in May,17th, 2016 (Record №5). In 2017, we conducted and conducted a survey of medical personnel in the intensive care unit and the therapeutic department of the hospital of the city hospital in Odintsovo, aimed at studying the factors of the components and causing professional deformation. The study involved 60 people, including 2 groups of health workers, respectively, resuscitation in the number of 30 people, the average age is 38-42 years, and therapy is also in the amount of 30 people, the average age is 41-44 years. In the process of psychological research the following methods were used:

"Methods of studying responsibility," the author-AV Makhnach [41];

Methodology "The scale of emotional response", authors: A Mehrabyan and N Epstein [13];

"Methods for studying stress resistance" [42].

The study was carried out in several stages:

The first stage of the study: the study of the level characteristics of the expression of responsibility among medical personnel in the intensive care and therapeutic departments;

The second stage of the study: the study of stress resistance during the working day in the medical staff of the intensive care unit and therapeutics in dynamics.

The third stage of the study: the study of empathy in the surveyed groups (emotional empathy based on the mechanisms of projection and imitation, cognitive, based on intellectual processes, behavioral, action with empathy and predicative, manifested as a person's ability to predict the affective reactions of another in specific situations.

4th stage: conducting a comparative analysis of the psychological characteristics of occupational deformity in medical staff of resuscitation and therapy, and investigating the relationship between working conditions and the professional deformation of hospital medical personnel.

Data processing was carried out by various statistical methods, including both parametric and nonparametric ones. The Mann-Whitney U test was used; t-Student's test with the test of equality of mean values in two samples; the method of the transcription of the Spiracle.

Results and Discussion

As a result of the study of the level characteristics of the severity of responsibility, the differences in indices were revealed in the medical staff of the resuscitative and therapeutic departments, the mean group values of 21.0 and 16.7 points respectively, the statistical significance of the differences between the groups (U-Mann-Whitney: *-p<0.05), Figure 1 and Figure 2.

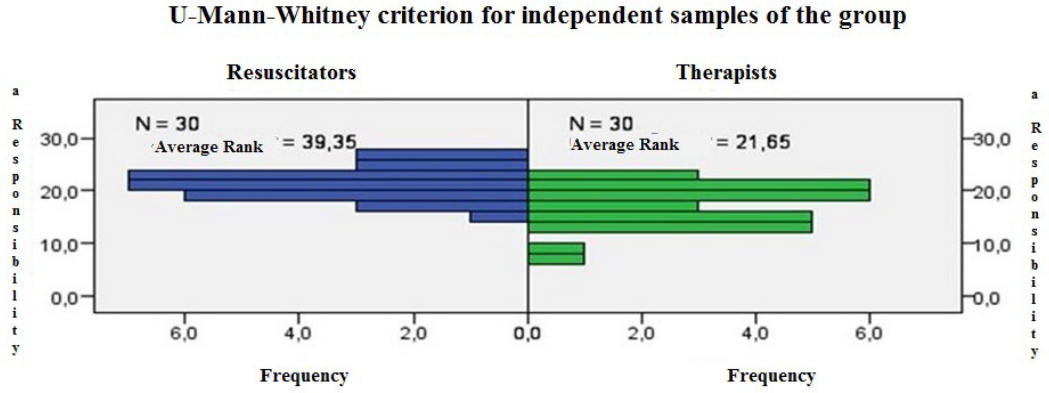

Figure 1: Comparison of responsibility results.

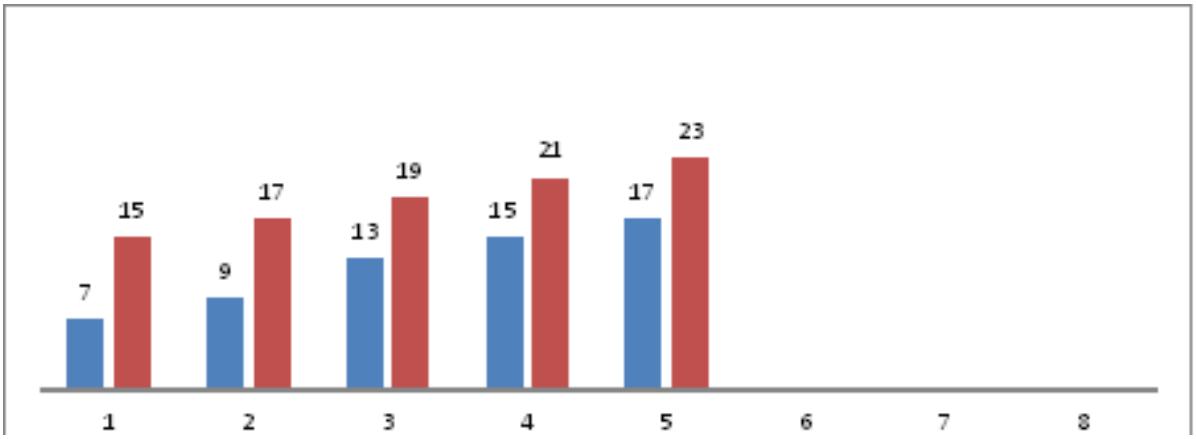

Figure 2: Comparison of the results of responsibility in the group of resuscitators and in the group of therapists.

However, it should be noted that the severity of the responsibility at a high level among the medical workers in both departments was found only in half of the surveyed (Figure 3), with the advantage of the presence of responsibility in the indicators of the surveyed health workers in the intensive care unit (49% of the surveyed groups had a high level and 47% mean), whereas in therapy the data are somewhat lower (Table 1).

Group	Levels of responsibility		
	High level	Average level	Low level
Resuscitation	49%	47%	10%
Therapy	42%	40%	10%

Table 1: Research responsibility.

This fact indicates the determination of the working conditions, since the health workers in the intensive care unit often have functional responsibilities for saving lives, removing patients from a crisis health situation, which requires special social and personal responsibility.

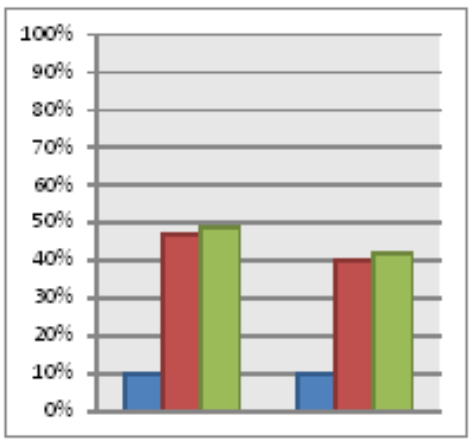

Figure 3: Results of the study of responsibility of medical staff of the intensive care unit.

Assessment of stress resistance in health workers in the dynamics during the working day revealed the absence of reliable differences in the indicators of the beginning of the working day, in the middle of the working day and on the day off. The Student's t-test with the test of equality of the mean values in two samples shows the same results for the average values of the dynamics of stress-resistance (Table 2). However, the stress-resistance indicators at the end of the working day in the medical staff of the intensive care unit demonstrate a significant increase, while in therapy the indices remained at the same level, which indicates the ability of the intensive care unit workers to concentrate and adapt to the stressful factors with maximum adaptation, when there is a need for stable concentration, concentration, the need to keep stress under control and to distribute our forces competently.

In addition, it can be noted that the low level of stress resistance in the two groups is absent, and also indicate a slight increase in stress resistance at the level of trends in the two groups during the working day. On the day off, the health workers of the groups studied have a high level of stress resistance at the level of the average working day indicators, which indicates that this has already been developed as a professionally important quality and personality.

Groups	Stress-resistance at the beginning of the working day	Stress-resistance in the middle of the working day	Stress-resistance at the end of the working day	Stress-resistance on a day off
Department of therapy	33,4	34,9	35,4	32,3
Department of resuscitation	34,1	37,4	45,5	34,2

Table 2: Mean values.

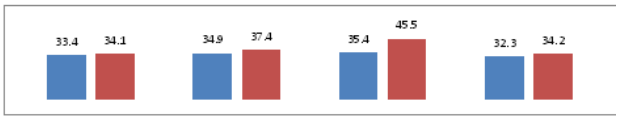

Figure 4: Average group indicators of stress resistance.

The results of the manifestation of the levels of empathic abilities were shown in the study and comparison of the results, by the U-Mann-Whitney criterion, between the monitored group of the resuscitation ward and the group of medical personnel of the treatment unit being examined, that significant differences were not revealed. However, in the resuscitation group there are indicators with very high empathy, a low level in both groups is absent (Figure 4).

Conclusion

Summarizing all of the above, it is obvious that there are differences in professionally important qualities, factors of professional deformation among medical workers depending on working conditions. Thus, the medical staff of the intensive care unit has a high level of responsibility and high stress-resistance at the end of the working day, whereas the medical staff of the therapeutic department have all the indicators at the average level, which indicates a greater susceptibility to this category of professional deformation associated with maladaptation, and with a decrease in the quality of adaptive capacity, professional deformation develops. It should also be noted that the problem of professional deformation is actual today, as the labor market places ever higher and stricter demands on professionals. The development of adaptation mechanisms will open up possible ways of overcoming professional and personal crises in the medical field.

In connection with this, it is interesting and promising to further study the problem of the specific features of the manifestation and prevention of professional deformity in medical workers, depending on working conditions.

References

1. Medvedev IN (2016) Platelet functional activity in clinically healthy elderly. Advances in gerontology 29: 633-638.
2. Medvdev IN, Skoryatina IA, Zavalishina SY (2016) Aggregation ability of the main blood cells in arterial hypertension and dyslipidemia patients on rosuvastatin and non-drug treatments. Cardiovasc ther prev 15: 4-10.
3. Bikbulatova AA (2014) Determining the thickness of materials in therapeutic and preventive heat-saving garments. Proceedings of higher education institutes. Textile Industry Tech 1: 119-123.
4. Bikbulatova AA, Andreeva EG (2017) Dynamics of Platelet Activity in 5-6-Year Old Children with Scoliosis Against the Background of Daily Medicinal-Prophylactic Clothes' Wearing for Half A Year. Biomed Pharmacol J 10.
5. Bikbulatova AA (2017) Dynamics of Locomotor Apparatus' Indices of Preschoolers with Scoliosis of I-II Degree Against the Background of Medicinal Physical Training. Biomed Pharmacol J 10.
6. Shmeleva SV, Yunusov FA, Morozov YUS, Seselkin AI, Zavalishina SYU (2018) Modern Approaches to Prevention and Correction of the Attorney Syndrome at Sportsmen. Prensa Med Argent 104: 2
7. Zavalishina SYu (2017) Physiological Dynamics of Spontaneous Erythrocytes' Aggregation of Rats at Last Ontogenesis. Ann Res Rev Biol 13: 1-7.
8. Zavalishina SY, Medvedev IN (2016) Features aggregation erythrocytes and platelets in old rats experiencing regular exercise on a treadmill. Advances in gerontology 29: 437-441.
9. Morozova EV, Shmeleva SV, Rysakova OG, Bakulina ED, Zavalishina SY (2018) Psychological Rehabilitation of Disabled People Due to Diseases of the Musculoskeletal System and Connective Tissue. Prensa Med Argent 104: 2.
10. Medvedev IN (2016) Dynamics of violations of intravascular platelet activity in rats during the formation of metabolic syndrome using fructose models. Problems Nutri 85: 42-46.
11. Medvedev IN, Zavalishina SY (2016) Platelet Activity in Patients With Third Degree Arterial Hypertension and Metabolic Syndrome. Kardiologiia 56: 48-50.
12. Zavalishina SY (2017) Restoration of Physiological Activity of Platelets in New-Born Calves With Iron Deficiency. Biomed Pharmacol J 10: 711-716.
13. Skoryatina IA, Zavalishina SY, Makurina ON, Mal GS, Gamolina OV (2017) Some aspects of Treatment of Patients having Dislipidemia on the Background of Hypertension. Prensa Med Argent 103: 3.
14. Skoryatina IA, Zavalishina SY (2017) Impact of Experimental Development of Arterial Hypertension and Dyslipidemia on Intravascular Activity of Rats' Platelets. Ann Res Rev Biol 14: 1-9.
15. Skoryatina IA, Zavalishina SY (2017) A Study of the Early Disturbances in Vascular Hemostasis in Experimentally Induced Metabolic Syndrome. Ann Res Rev Biol 15: 1-9.
16. Skoryatina IA, Medvedev IN, Zavalishina SY (2017) Antiplatelet control of vessels over the main blood cells in hypertensives with dyslipidemia in complex therapy. Cardio Ther Prevent 16: 8-14.

17. Zavalishina SYu, Medvedev IN (2017) Comparison of opportunities from two therapeutical complexes for correction of vascular hemostasis in hypertensives with metabolic syndrome. Cardio Ther Prevent 16: 15-21.
18. Medvedev IN, Skorjatina IA, Zavalishina SYu (2016) Vascular control over blood cells aggregation in patients with arterial hypertension with dyslipidemia. Cardio Ther Prevent 15: 4-9.
19. Sizov AA, Zavalishina SJ (2015) Russian Criminal Legislation in Prevention of Sexually Transmitted Diseases in the Territory of the Russian Federation. Biol Med 7: 142-155
20. Glagoleva TI, Zavalishina SY (2017) Aggregation of Basic Regular Blood Elements in Calves during the Milk-feeding Phase. Cardio Ther Prevent 17: 1-7.
21. Glagoleva TI, Zavalishina SY (2017) Physiological Peculiarities of Vessels' Disaggregating Control over New-Born Calves' Erythrocytes. Ann Res Rev Biol 19: 1-9.
22. Makhov AS, Medvedev IN, Rysakova OG (2017) Functional features of hemostasis and physical fitness of skilled snowboarders with hearing impairment. Teoriya i Praktika Fizicheskoy Kultury 12: 27.
23. Medvedev IN (2017) The Impact of Durable and Regular Training in Handto-hand Fighting Section on Aggregative Platelet Activity of Persons at the First Mature Age. Ann Res Rev Biol 15: 1-6.
24. Medvedev IN (2017) Microrheology of erythrocytes in arterial hypertension and dyslipidemia with a complex hypolipidemic treatment. Russ J Cardiol 4: 13-17.
25. Makhov AS, Medvedev IN (2018) Motor rehabilitation of children with cerebral palsy. Teoriya i Praktika Fizicheskoy Kultury 6: 8.
26. Antonovsky A (2007) Unraveling the mystery of health: How people manage stress and stay well. San Francisco.
27. Belyakova NV, Petrova EA, Polyakova OB (2017)The influence of professional deformities (burnout) on the image of a female leader. Eco soc dev Moscow, Russia.
28. Klimova EA, Noskovoy OG, Solntseva GN (2015) Psychology of work. Eng Psy Ergonomics 1: 618.
29. Bonkalo TI, Bonkalo SV, Kolesnik NT, Polyakova OB, Sorokoumova EA (2015) Development of ethnic social identity among the members of ethnic community organizations as the factor of preventing the spread of nationalist sentiments in a multicultural society. Biosci Biotech Res Asia 12: 2361-2372.
30. Zeer EF (2005) Psychology of professions. Moscow, Russia.
31. Mironova OI, Polyakova OB, Ushkov FI (2017) Impact of compiled contacts on psychosomatic disorders of employees of organizations. Economic and social development, Moscow, Russia.
32. Field MV, Stone EV, Pryazhnikov NS (2016) Professional deformations and professional suitability of personnel. Theory and practice of management: Materials of interuniversity inter-departmental scientific-practical round table. Moscow, Russia.
33. Polyakova OB (2014) Category and structure of professional deformations. National Psy J 1: 57-64.
34. Solzhenkin VV (2003) Psychological bases of medical activity. Academic Project, Moscow, Russia.
35. Polyakova OB (2014) Category professional deformation in psychology. Procedia: Soc Behavioral Sci 146: 279-282.
36. Karnaukhova AO (2017) Psychological Aspects of the Phenomenon of Professional Deformation. Young Scientist 1: 393-399.
37. Romanova ES (2008) 99 popular professions. Psychological analysis and professiograms. St. Petersburg: Peter, USA.
38. Polyakova OB (2014) The structure of professional deformation. Procedia. Soc Behavioral Sci 146: 420-425.
39. Ilyin EP (2013) Psychology of care. St. Petersburg, USA.
40. Shirom A (2005) Reflections on the study of burnout. Work Stress 19: 263-270.
41. Rozanova VA (2008) Psychology of management. Moscow, Russia.
42. Geysselhart R, Burkart HK (2006) Farewell, stress Best relaxation techniques. Moscow, Russia.