

Original article

WELL-BEING, LIFE SATISFACTION AND BURNOUT IN EMPLOYEES OF ANESTHESIOLOGY AND INTENSIVE CARE DEPARTMENTS IN RUSSIA**Running title: Well-being in anesthesiology and intensive care departments**

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Abstract

Background: Happiness appears to be a protective factor for morbidity and mortality. Nowadays, medical staff faces different psychological stressors, and it necessitates constant monitoring and strong well-being support. Depression is common in medical professionals, and it is closely related to suicide, and it may be a marker of suicide risk. The study focuses on satisfaction with life, psychological well-being, and burnout in anesthesiology and intensive care departments. **Methods:** This was an anonymous and name-blinded multi-center study-survey. Paper and electronic questionnaires were sent to the different hospitals in Russia. The study included anesthesiology and intensive care departments employees who voluntarily took part. The primary outcomes were satisfaction with Life Scale (SWLS), Scale of Positive and Negative Experience (SPANE), Brief Inventory of Thriving (BIT), Maslach Burnout Inventory (MBI); the study also included questions about suicidal thoughts and reasons to live. **Results:** 420 anesthesiology and intensive care department employees participated anonymously in the study. Median SWLS were as follows: anesthesiologists -19 points; intensivists -17; nurses -14. The median life satisfaction score was slightly below average. The suicidal thoughts question revealed that 57.9% of employees never thought about suicide. According to MBI: E.E., 51% of anesthesiologists had high scores, 35.8% intensivists, and 50% nurses. DP high scores were present in 31.25% of anesthesiologists, 19.17% of intensivists, 35.9% of nurses. High levels of P.A. were found in 65% of anesthesiologists, 47.5% of intensivists, 25% of nurses. **Conclusion:** Physicians are exposed to high levels of stress at their work, and at the stage of burnout, this could have far-reaching implications on patients and the healthcare system increase of medical errors. Organizational measures are vital to support the staff's mental health and address burnout through social support and psychological support (psychotherapy). The lack of happiness is a potential contributor to disease risk. The lowest median of satisfaction with life in our study was found among nurses. According to the correlation analysis, we reject the hypothesis about the lack of correlation between life satisfaction and burnout.

Keywords: Well-being; Burnout; Anesthesiologists; Intensivists; Nurses

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Introduction

The pandemic and the health care system's response have placed an enormous strain on the health care staff¹. Hospitals needed to dramatically alter workflows to protect and treat patients and protect the physical health and emotional well-being of staff¹. Health is more than the absence of illness, and it fosters personal and social resources. In addition to promoting physical health, cultivating positive emotions is associated with psychological health that can lead people, organizations, and communities to well-being. Mental health and its promotion are considered an integral part of health promotion practice. Positive mental health includes psychological skills essential to human fulfillment and well-being. It is noted that assessing positive mental health, including well-being, can help promote health. According to B. Fredrickson's theory of broadening and building, positive emotions can broaden one's awareness. Resilient people experience positive emotions more frequently and recover more quickly from specific life stressors. For example, one of the positive emotions, „joy”, creates the urge to push the limits and be creative; another one, „interest” creates the desire to explore and adapt to new information and experiences; one more, „contentment” creates the urge to consider current life circumstances and integrate them into a unique view of themselves and the world. Thus, people with positive emotions could have more benefits in different spheres: profession, health, and family. Numerous studies note that positive emotions and evaluations of life are associated with decreased risk of disease; for example, laughter contributes to the growth of positive emotions, leading to improvements in the immune system and benefiting individuals with cardiovascular disease. Studies show that positive emotions precede successful work, social relationships, and physical health outcomes. Positive emotions generally lead to a speedier recovery and increased life expectancy. Research of handwritten autobiographies from 180 Catholic nuns (which they made at 22 years) showed a strong association between positive emotional content in these writings and life expectancy^{2,3,4,5,6}. Happiness could be a protective force concerning all-cause mortality⁷.

Materials and methods

Ethical approval for this study was not required because it was an anonymous study of medical employees. Anonymous paper and electronic questionnaires were sent to the different hospitals. And they were received as completed questionnaires. The authors of this article did not contact the respondents in this study.

Satisfaction with Life Scale

Satisfaction with Life Scale (SWLS)⁸ is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. The **score** is presented as very high score (30–35); high score (25–29) highly satisfied, , average score (20–24), slightly below average (15–19) in life satisfaction, dissatisfied (10–14), extremely dissatisfied (5–9). (*Judgments: In most ways, my life is close to my ideal. The conditions of my life are excellent. I am satisfied with my life. So far, I have gotten the important things I want in life. If I could live my life over, I would change almost nothing*)).

The scale of Positive and Negative Experience

The Scale of Positive and Negative Experience (SPANE)⁸ is a 12-item questionnaire that includes six items to assess positive feelings and six items to assess negative feelings. Three are general (e.g., positive, negative) for the positive and negative items, and three per subscales are more specific (e.g., joyful, sad). Positive Feelings scores vary from 1 to 5 for the six items: positive, good, pleasant, happy, joyful, and content. The score can range from 6 (lowest possible) to 30 (highest positive feelings score). Negative Feelings scores vary from 1 to 5 for the six items: negative, bad, unpleasant, sad, afraid, and angry. The score can range from 6 (lowest possible) to 30 (highest negative feelings score). Affect Balance -the negative feelings score is subtracted from the positive feelings score.

Brief Inventory of Thriving

Brief Inventory of Thriving (BIT)⁸ measures thriving as well as Examining the measurement equivalence of the Comprehensive Inventory of Thriving (CIT)⁹. BIT- were developed with two specific goals: (1) to measure a broad range of psychological well-being constructs and repre-

sent a holistic view of positive functioning; and (2) to predict essential health outcomes useful for researchers and health practitioners. BIT has ten items in total and can serve as an indicator of psychological well-being and a brief mental health screening tool. The highest best points – 50.

Maslach Burnout Inventory

Maslach Burnout Inventory (MBI) demonstrates emotional exhaustion (E.E.), depersonalization (D.P.), reduced professional accomplishment (P.A.). The results are presented as:

- E.E. – medium level of burnout is 16–24, high level > 25,
- D.P. – medium level of burnout is 6–10, high level > 11,
- P.A. – medium level of burnout is 31–36, high level < 30.

The study also included general questions such as gender, age, specialization and working experience, thoughts about suicide, reasons to live, etc. Statistical analysis was performed with R-Studio (Version 1.0.153 2009-2017 RStudio). Mann-Whitney U-test was used for assessing the differences between two independent samples. $P < 0.05$ was considered statistically significant.

Results

Population: Overall questionnaires were answered by 420 anesthesiology and intensive care departments employees in Moscow, including 80 anesthesiologists, 120 intensivists, 220 nurses, and junior nurses (Table 1).

Life Satisfaction (SWLS) median scores were as follows: anesthesiologists -19 points \pm 6,9 (19 points = slightly below average in life satisfaction); intensivists -17 points \pm 6,14 (slightly below average in life satisfaction), and nurses -14 points \pm 6,82 9 (14 points = dissatisfied). The lowest median of satisfaction with life in our study was present among nurses. The median of life satisfaction is slightly below average.

Considering the burnout, according to MBI 420 anesthesiology and intensive care departments employees: emotional exhaustion (E.E.); 51% of anesthesiologists had high scores, 35,8% of intensivists, and 50% of nurses. Depersonalization (DP) high scores were present in 31,25% anesthesiologists, 19,17% intensivists, and nurses 35,9%. A high level of reduced professional accomplishment (P.A.) was present in 65% of anesthesiologists, 47,5% of intensivists, 25% of nurses (Table 2).

Anesthesiologists' satisfaction with life has a link with the level of D.P., P.A., and positive and negative experience. Intensivists' satisfaction with life is connected with the level of D.P. and positive and negative experiences. Nurses' and junior nurses' satisfaction with life has a link with the level of D.P., P.A., and Positive and Negative Experience. However, the level of satisfaction with life could not be explained only by burnout and the level of positive and negative experiences.

In addition to the questionnaires, respondents were also asked to answer a series of general questions, one of which is „thoughts about suicide” presented in Figure 2.

Answers on question „never thought about suicide” was positive in 61,25% of anesthesiologists, only 54,17% of intensivists, and 58,64% of nurses.

Table 1: Demographic data

Profession	Sex (Female/male)	Age (years)	Practice experience (years)
<i>Anesthesiologists</i>	22/58	40,2 (26–67)	14,6 (1–40)
<i>Intensivists</i>	53/67	40,15 (24–70)	13,6 (0,6–45)
<i>Nurses and junior nurses</i>	169/51	34,6 (19–65)	11,2 (0,2–39)

Table 2: Regression analysis of links between Satisfaction with Life (SWLS) and Burnout, Positive / Negative Experience (SPANE).

Regression analysis of links between Satisfaction with Life (SWLS) and Burnout, Positive / Negative Experience (SPANE)				
<i>Questionnaire</i>	Estimate	Std. Error	t-value	P-value
<i>anesthesiologists</i>				
(Intercept)	11.20162	4.21562	2.657	0.00962 **
<i>EE</i>	-0.07098	0.05682	-1.249	0.21552
<i>DP</i>	-0.24476	0.11512	-2.126	0.03679 *
<i>PA</i>	0.26585	0.09358	2.841	0.00579 **
Positive and Negative Experience	0.38374	0.12321	3.114	0.00261 **
<i>intensivists</i>				
(Intercept)	11.92453	3.28640	3.628	0.000427 ***
<i>EE</i>	-0.03512	0.05122	-0.686	0.494345
<i>DP</i>	-0.35606	0.09929	-3.586	0.000494 ***
<i>PA</i>	0.06751	0.08208	0.822	0.412495
Positive and Negative Experience	0.56905	0.08546	6.659	9.91e-10 ***
<i>nurses and junior nurses</i>				
(Intercept)	6.98873	3.53945	1.975	0.049602 *
<i>EE</i>	-0.02941	0.05162	-0.570	0.569466
<i>DP</i>	-0.22431	0.10659	-2.104	0.036501 *
<i>PA</i>	0.29778	0.07559	3.940	0.000110 ***
Positive and Negative Experience	0.24124	0.07204	3.349	0.000959 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1				

es and junior nurses. Just a little more than a half of doctors and nurses never thought about suicide, means that almost a half of employees have thoughts about it. The Brief Inventory of Thriving (BIT) – measure of a comprehensive construct of wellbeing – median for anesthesiologists -30 points 11,71; for intensivists – 24 points \pm 14,81; for nurses – 39 points 10,37. According to this test, the lowest median of psychological well-being in our study was showed among intensivists. Evaluation of psychological well-being is in figure 3.

The appendix includes correlation analysis between age, work experience, E.E., D.P., P.A., life

satisfaction, subjective evaluation of happiness, and well-being (BIT). According to the correlation analysis, we reject the hypothesis about the lack of correlation between life satisfaction and burnout.

Discussion

Positive emotions can be partly heritable². This does not mean that having heritable emotions can not help working on our emotions, managing them, improving our mood, and developing a positive attitude to life. According to H. J. Freudenberger (1974), burnout is a phenomenon of per-

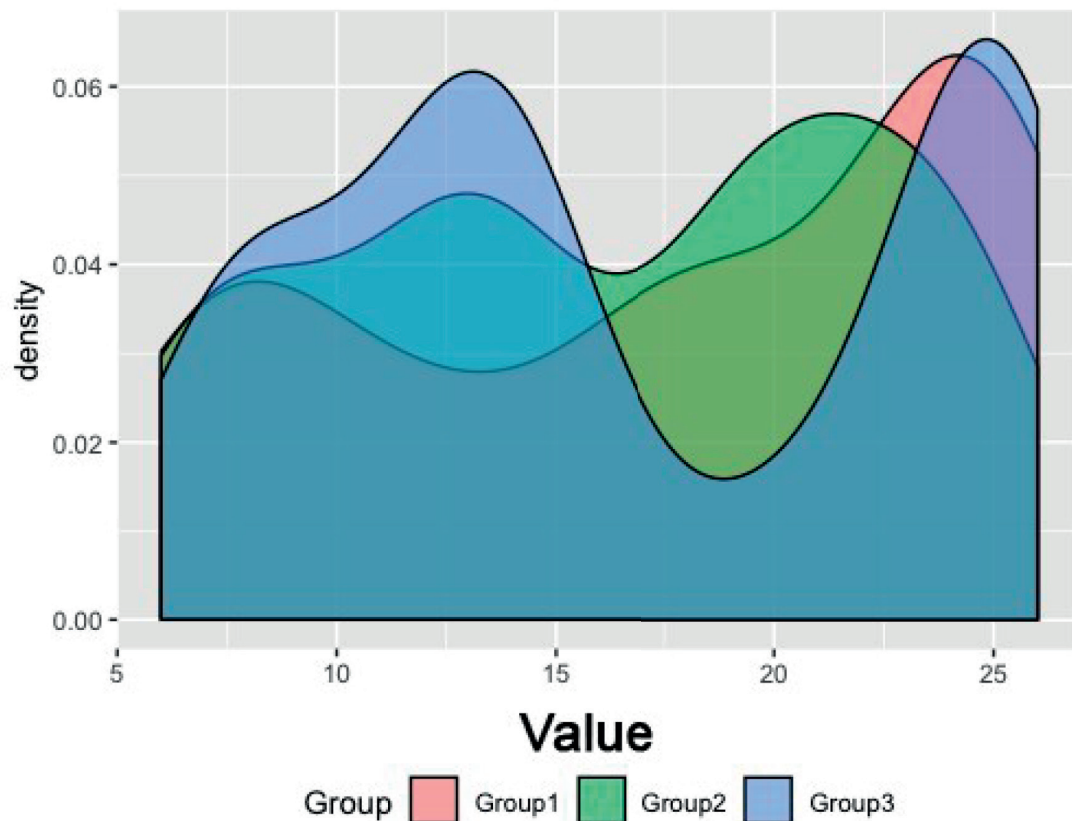


Figure 1: Satisfaction with Life (SWLS): Group 1 – anesthesiologists, Group 2 – intensivists, Group 3 – nurses and junior nurses. The lowest median of life satisfaction in our study had intensivists and nurses.

Table 3: Comparison data: anesthesiologists and intensivists; nurses, junior nurses, and intensivists. Mann–Whitney U-test.

Comparison data: anesthesiologists and intensivists; nurses, junior nurses, and intensivists Mann–Whitney U-test	
Questionnaire	P value comparison
	<i>anesthesiologists and intensivists</i>
SWLS	p = 0.1014
Affect balance	p = 0.0002068
EE	p = 0.001403
DP	p = 0.1712
PA	p = 0.1121
well-being (BIT)	p = 0.1348
	<i>nurses / junior nurses and intensivists</i>
SWLS	p = 0.2133
Affect balance	p = 0.7071
EE	p = 0.0002967
DP	p = 0.0002107
PA	p = 4.679e-06
well-being (BIT)	p = 2.707e-05

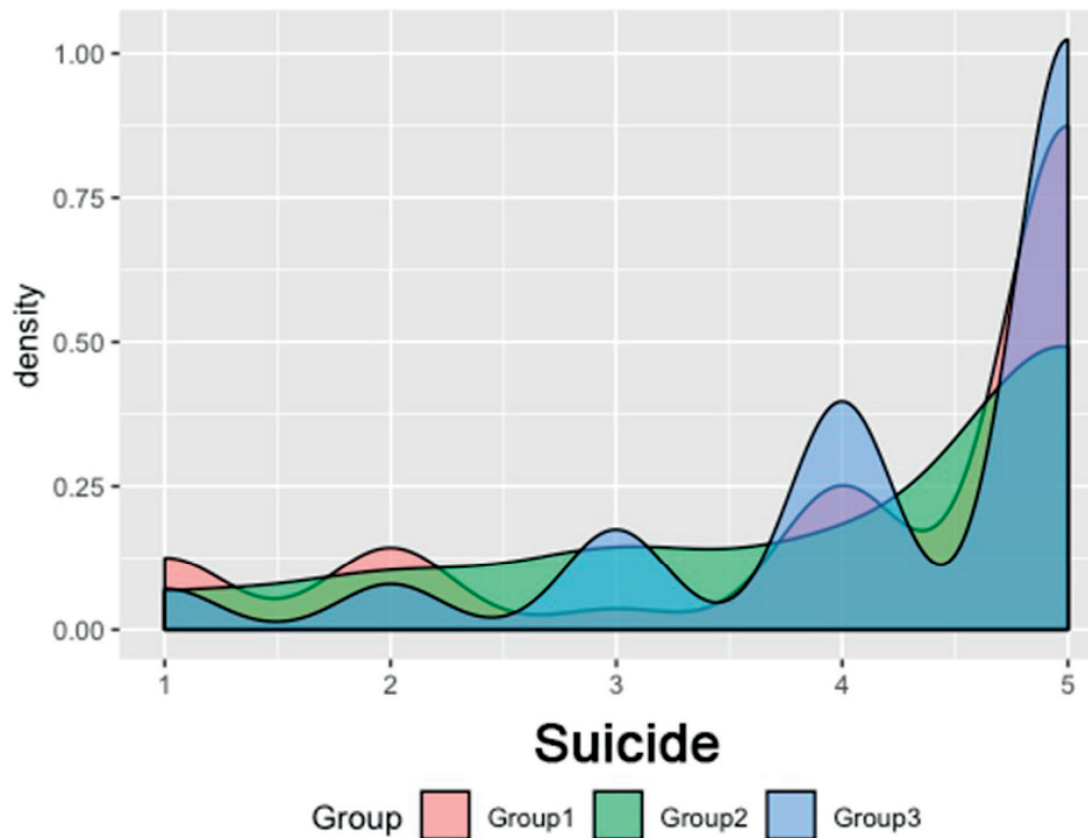


Figure 2: Suicide: Yes, I thought about it – 1; Sometimes – 2; Rarely – 3; Almost never – 4; Never thought about it – 5. Group 1 – anesthesiologists, Group 2 – intensivists, Group 3 – nurses and junior nurses.

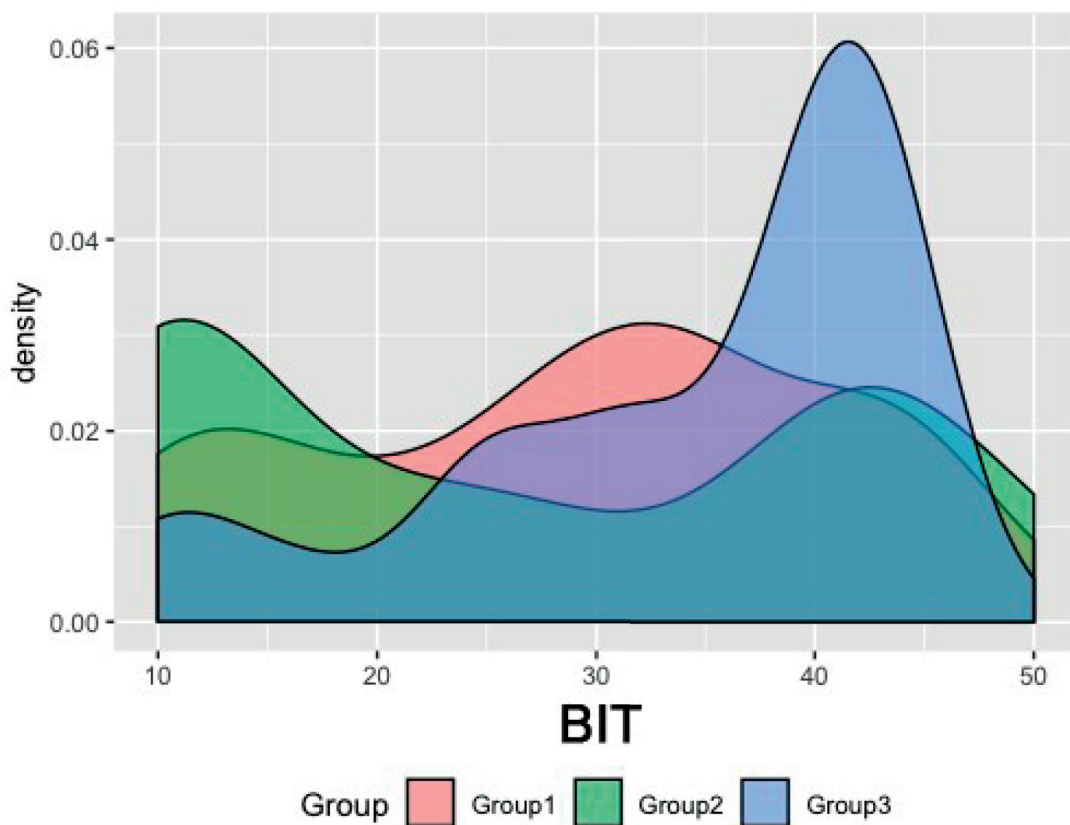


Figure 3: Psychological well-being (BIT): Group 1 – anesthesiologists, Group 2 – intensivists, Group 3 – nurses and junior nurses.

sonal deformation, the state of physical, emotional, and mental exhaustion, which affects the person, destroying him and having a negative impact on the effectiveness of professional activity¹⁰.

Nowadays, various studies show that depression and burnout have increased among physicians. Burnout has been identified in approximately half of all practicing physicians. The risk of suicide and suicidal ideas begin to grow from 4% during the pre-internship period to the actual highest rate of suicide in physicians at late middle age¹¹. Doctors at all stages of the career have higher levels of depression (up to 60%) than the general population¹². This is one of the significant reasons for completed suicide and substance misuse^{13,12}. Doctors have suicidal thoughts more often than the general population¹²; a quarter of doctors have had thoughts of suicide for the past 12 months¹³.

Anhedonia and dissatisfaction, particularly at the workplace, could also be risk factors for appearing suicidal thoughts¹⁴. Anesthesiologists¹³ and intensivists have lost too many colleagues through suicide and severe depression¹⁵; they are associated with a higher risk of suicide. According to the Russian study¹⁶ (2019), the results indicate a significant prevalence of emotional exhaustion, depersonalization, reduced professional achievements, and a high degree of suicide risk in anesthesiology and intensive care departments. The results showed that 70% to 95% of anesthesiologists and intensivists (MBI) have high rates in some of the three sub-scales of burnout, and high rates in all three subscales of burnout syndrome were present in 20 to 40% of employees¹⁶.

According to the systematic review¹⁷ (2017), anesthesiology is among the most stressful medical disciplines. The data analysis of fifteen studies (MBI) showed high risk from 10% to 41% and moderate risk in 59% of respondents. It is also noted that prevention of burnout syndrome should begin with its diagnostics; this theme is essential because it is associated with quality of care and patients' safety¹⁷. Disruptive behavior in the surgery room can have severe consequences for patients and institutions. This behavior undermines patients care by decreasing individual and team clinical efficiency¹⁸. Depression is common in medical professionals, including anesthesiologists, and it is closely related to suicide, so that it may be a marker of suicide risk¹⁹. For example, according to the

data analysis of 2000 American family physicians, personal accomplishment at work had significant positive correlations with happiness²⁰. The study of happiness in Brazilian psychiatrists showed that having children, increased sexual interest, and a sense of humor positively correlated to happiness²¹.

The lack of happiness is a potential contributor to disease risk. Negative emotions may lead to coronary heart disease, stroke, diabetes. Depression leads to increased mortality among people with diabetes, stroke, some kinds of cancers. Review of happiness proposes two significant reasons for taking happiness seriously in the context of health: 1- the absence of negative states, such as depression, does not mean that you are happy; 2- potential for intervention, development of techniques to improve positive well-being and cultivate feelings of happiness⁷. Happiness is associated with better health subjective well-being is associated prospectively with better health and reduced mortality²².

The distinction between pleasure and interest has been extensively researched. According to the review⁷, there are some principal elements/factors contributing to happiness: genetics, education, socioeconomic status, social network, time use and activities, stress exposure, marital status, personality. But, various factors may impact different people in different way⁷. Some researches show the correlation between income and life satisfaction level. It is assumed that people with a high level of life satisfaction have better social relationships and better health. It is noted that results could be different in different countries and other age groups. Individuals with high incomes tend to be happier than individuals with lower incomes. Still, life satisfaction varies to varying life periods in midlife adults, who show distinctively stronger associations between revenue and life satisfaction than younger and older adults^{23,24}. The question of happiness and its correlation with different things is under discussion. Professional activity, physical activity, depression, consumption of fruit and vegetables, sun protection, excessive alcohol consumption, and smoking, some researchers showed significant links between them and subjective well-being; others were inconclusive⁷.

Negative emotions, suffering, fears, anger, and sadness also are the subject of study. Work in a stressful environment – when life and health depend on you, nerves physicians and/or physical breakdowns

can have severe consequences for patients. Given the physician's responsibility, the study of burnout could help find some ways to solve the problem. Burnout can be strongly related to alcohol abuse²⁵. Physicians are exposed to high levels of stress at their work, and at the stage of burnout, this could have far-reaching implications on patients and the healthcare system, increasing medical errors²⁶. For the physicians, this could mean depression, sleep disturbances, alcohol and drug misuse, marital dysfunction, and suicide²⁶. Neuroticism can contribute to burnout²⁷. Whereas positive emotions broaden individuals' thoughts⁶, they should help protect from negative emotions and consequences. Positive emotions create physiological support from depression to heart disease and aggression⁶. According to the review, well-being subjectively reflects an overall evaluation of a person's life quality from his point of view. Different factors can influence this subjective reflection: weather, favorite team won/lost a game, cultures, and others. Health also can affect peoples' well-being. People with a high level of subjective well-being would remember more positive events from their lives and use positive adjectives inaccurate descriptions of themselves. It is assumed that happy and unhappy people differ in their cognitive patterns, but the theories linking these structures are far from complete. It is also noted that there are still many important questions that should be investigated²⁸.

For example, the study²⁹ investigated the relationship between system values during medical education and styles of success in the medical career. Authors can identify during medical education which students will be at risk of professional burnout after studies. The most important differences between students who can have burnout later as doctors and those at lower risk are family security, freedom, happiness, mature love, self-respect, social recognition, and wisdom²⁹.

In our study, according to MBI: E.E., in this study, high scores had - 51% of anesthesiologists, 35,8% of intensivists, and 50% of nurses. DP high scores have - 31,25% of anesthesiologists, 19,17% of intensivists, 35,9% of nurses. High level of P.A. had - 65% of anesthesiologists, 47,5% of intensivists, 25% of nurses.

Comparing the data between anesthesiologists and intensivists, we could see that the median of intensivists life satisfaction is lower than that of

anesthesiologists. The median of nurses' life satisfaction is lower than the median of intensivists' life satisfaction. In our study, the lowest median of BIT of psychological well-being was found among intensivists. According to Brief Inventory of Thriving tests, the best score is 50 points. It means that intensivists in our research had just a half in a median meaning, the level of their well-being is low. But all groups in our study do not have a big score of well-being evaluation. The employee's level of self-esteem of happiness/well-being is relatively low. The lowest median of Life Satisfaction in our study was recorded among nurses.

According to the correlation analysis, we reject the hypothesis about the lack of correlation between life satisfaction and burnout. Suicide/ suicide thoughts are a big problem; just a little more than a half of medical employees (57,9%) in our study never thought about suicide, which means that almost half of employees have various degrees of thoughts about it.

Conclusion

Physicians are exposed to high levels of stress at their work, and at the stage of burnout, this could have far-reaching implications on patients and the healthcare system increase of medical errors. Organizational measures are vital to support the staff's mental health and address their burnout through social support, psychological support-psychotherapy.

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APPENDIX

Table 4: Correlation analysis between age, work experience, E.E., D.P., PA, life satisfaction, happiness, well-being (BIT)

Correlation analysis between age, work experience, E.E., D.P., PA, life satisfaction, happiness, well-being (BIT)		
Anesthesiologists		
variable	coefficient	P-value
age vs. EE	0.19590046	8.159116e-02
age vs. DP	0.20366297	6.998781e-02
age vs. PA	-0.20260321	7.148883e-02
age vs. life satisfaction	-0.10766860	3.417933e-01
age vs. happiness	-0.06926235	5.415405e-01
age vs. emotional now	-0.04035396	7.222892e-01
age vs. BIT	-0.09919623	3.813367e-01
work experience vs. EE	0.11694045	3.015876e-01
work experience vs. DP	0.27944111	1.206340e-02
work experience vs. PA	-0.14993644	1.843487e-01
work experience vs. life satisfaction	-0.12947814	2.523388e-01
work experience vs. happiness	-0.01837257	8.714976e-01
work experience vs. emotional now	-0.01854416	8.703078e-01
work experience vs. BIT	-0.09829911	3.856791e-01
EE vs. DP	0.36120581	9.956184e-04
EE vs. PA	-0.37380899	6.365555e-04
EE vs. life satisfaction	-0.57051323	3.298246e-08
EE vs. happiness	-0.53666522	2.875771e-07
EE vs. emotional now	-0.39396198	2.996147e-04
EE vs. BIT	-0.60359225	3.097056e-09
DP vs. PA	-0.49238852	3.497217e-06
DP vs. life satisfaction	-0.58070667	1.636243e-08
DP vs. happiness	-0.53783454	2.678954e-07
DP vs. emotional now	-0.28530673	1.031001e-02
DP vs. BIT	-0.52694251	5.132361e-07
PA vs. life satisfaction	0.45405632	2.333142e-05
PA vs. happiness	0.44612082	3.361671e-05
PA vs. emotional now	0.37553121	5.979695e-04
PA vs. BIT	0.41888334	1.101519e-04
life satisfaction vs. happiness	0.79905501	6.541017e-19

life satisfaction vs. emotional now	0.19448436	8.386432e-02
life satisfaction vs. BIT	0.93776249	1.427004e-37
happiness vs. emotional now	0.35378196	1.284990e-03
happiness vs. BIT	0.84777831	3.467754e-23
emotional now vs. BIT	0.19141873	8.895754e-02
<i>Intensivists</i>		
age vs. EE	-0.068380876	4.580245e-01
age vs. DP	0.129292132	1.593045e-01
age vs. PA	-0.029984272	7.451081e-01
age vs. life satisfaction	-0.039852631	6.656208e-01
age vs. happiness	0.013450196	8.840762e-01
age vs. emotional now	0.093238516	3.111105e-01
age vs. BIT	-0.020714819	8.223150e-01
work experience vs. EE	-0.008075992	9.302395e-01
work experience vs. DP	0.143574791	1.177148e-01
work experience vs. PA	-0.080146031	3.842091e-01
work experience vs. life satisfaction	-0.044675410	6.280210e-01
work experience vs. happiness	-0.029377699	7.500929e-01
work experience vs. emotional now	0.085260778	3.544998e-01
work experience vs. BIT	-0.043695001	6.355918e-01
EE vs. DP	0.308550418	6.065332e-04
EE vs. PA	-0.590674598	1.237569e-12
EE vs. life satisfaction	-0.392281222	9.371036e-06
EE vs. happiness	-0.196158897	3.177511e-02
EE vs. emotional now	-0.367343792	3.672406e-05
EE vs. BIT	-0.407032783	3.958793e-06
DP vs. PA	-0.384315116	1.467409e-05
DP vs. life satisfaction	-0.408214700	3.688079e-06
DP vs. happiness	-0.191111192	3.653538e-02
DP vs. emotional now	-0.072388788	4.320369e-01
DP vs. BIT	-0.273353698	2.520658e-03
PA vs. life satisfaction	0.421038617	1.680317e-06
PA vs. happiness	0.325387048	2.874798e-04
PA vs. emotional now	0.145424476	1.130099e-01
PA vs. BIT	0.427122948	1.143998e-06
life satisfaction vs. happiness	0.628493219	1.530411e-14

life satisfaction vs. emotional now	0.223259058	1.424191e-02
life satisfaction vs. BIT	0.819431795	2.678301e-30
happiness vs. emotional now	0.237807762	8.911799e-03
happiness vs. BIT	0.578336394	4.599861e-12
emotional now vs. BIT	0.134665403	1.425303e-01
<i>Nurses / junior nurses</i>		
age vs. EE	-0.099387435	1.417253e-01
age vs. DP	-0.027748675	6.823096e-01
age vs. PA	0.060556069	3.713778e-01
age vs. life satisfaction	-0.114212229	9.104233e-02
age vs. happiness	0.071177668	2.932334e-01
age vs. emotional now	-0.039905554	5.560238e-01
age vs. BIT	0.053385922	4.307597e-01
work experience vs. EE	-0.183112239	6.457704e-03
work experience vs. DP	-0.070833851	2.955772e-01
work experience vs. PA	0.180868786	7.152613e-03
work experience vs. life satisfaction	-0.067077023	3.219976e-01
work experience vs. happiness	0.108573975	1.082762e-01
work experience vs. emotional now	0.009261192	8.913580e-01
work experience vs. BIT	0.135950468	4.397324e-02
EE vs. DP	0.645474650	2.552162e-27
EE vs. PA	-0.671912954	2.989741e-30
EE vs. life satisfaction	-0.530201408	2.392411e-17
EE vs. happiness	-0.606674816	1.659676e-23
EE vs. emotional now	-0.474211546	9.797288e-14
EE vs. BIT	-0.676232862	9.281558e-31
DP vs. PA	-0.427442665	3.483979e-11
DP vs. life satisfaction	-0.434017622	1.608921e-11
DP vs. happiness	-0.484012757	2.543755e-14
DP vs. emotional now	-0.328151468	6.421720e-07
DP vs. BIT	-0.511014493	4.919329e-16
PA vs. life satisfaction	0.526196283	4.568977e-17
PA vs. happiness	0.550600286	7.734113e-19
PA vs. emotional now	0.337733932	2.859596e-07
PA vs. BIT	0.584290908	1.555683e-21
life satisfaction vs. happiness	0.481307800	3.706545e-14

life satisfaction vs. emotional now	0.298466925	6.641516e-06
life satisfaction vs. BIT	0.563161386	8.295381e-20
happiness vs. emotional now	0.589810074	5.246522e-22
happiness vs. BIT	0.695769656	3.611873e-33
emotional now vs. BIT	0.475587499	8.128569e-14