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UDC 616.314:159.944

DOI – <https://doi.org/10.14300/mnnc.2023.18044>

ISSN – 2073-8137

## PROFESSIONAL BURNOUT OF DENTAL SPECIALISTS IN CLINICAL PRACTICE

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## ПРОФЕССИОНАЛЬНОЕ ВЫГОРАНИЕ СПЕЦИАЛИСТОВ СТОМАТОЛОГИЧЕСКОГО ПРОФИЛЯ В КЛИНИЧЕСКОЙ ПРАКТИКЕ

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Professional burnout syndrome (PBS) in the professional activity of a dentist is due to several causal factors, including occupational hazards. At the same time, its impact on the psycho-emotional state and general bodily health of dentists is significant. The study analyzes the causes of psychological stress in the context of interpersonal communication of the dentist – patient – administration of a medical organization.

*Keywords: occupational stress, occupational hazard, dental practice, burnout syndrome, anxiety, depression*

Синдром профессионального выгорания (СПВ), сопутствующий профессиональной деятельности врача-стоматолога, обусловлен целым рядом причинных факторов, включая профессиональную вредность. Влияние СПВ на психоэмоциональное состояние и общесоматическое здоровье врачей-стоматологов весьма существенно. В исследовании проведен анализ причин психологического стресса и развития СПВ, возникающего в контексте межличностного общения: врач-стоматолог – пациент – администрация медицинской организации.

*Ключевые слова: профессиональный стресс, производственная вредность, стоматологическая практика, синдром профессионального выгорания, тревожность, депрессия*

**For citation:** Bobryshev A. N., Sarkisov A. A., Reverchuk I. V., Tarasova S. I., Zelenskiy V. A. PROFESSIONAL BURNOUT OF DENTAL SPECIALISTS IN CLINICAL PRACTICE. *Medical News of North Caucasus*. 2023;18(2):191-193. DOI – <https://doi.org/10.14300/mnnc.2023.18044>

**Для цитирования:** Бобрышев А. Н., Саркисов А. А., Реверчук И. В., Тарасова С. И., Зеленский В. А. ПРОФЕССИОНАЛЬНОЕ ВЫГОРАНИЕ СПЕЦИАЛИСТОВ СТОМАТОЛОГИЧЕСКОГО ПРОФИЛЯ В КЛИНИЧЕСКОЙ ПРАКТИКЕ. *Медицинский вестник Северного Кавказа*. 2023;18(2):191-193. DOI – <https://doi.org/10.14300/mnnc.2023.18044>

CNS – central nervous system  
ISA – index of situational anxiety  
MO – medical organization  
PA – personal anxiety

PBS – professional burnout syndrome  
PS – professional stress  
RA – reactive anxiety

**Features of professional activity of dentists were high interpersonal and communicative activity [1–3]. Psycho-emotional overload and intensification of production create difficult working conditions and the inability of the doctor to cope with professional stress (PS) on his own [4]. Against this background develops professional burnout syndrome (PBS), which aggravates the occupational risk of the dentist [5, 6]. Individual approach to diagnosis and neutralization of stress factors associated with occupation and occupation is designed to ensure compliance with the principles of prevention and prevention. The constant search for ways to prevent and protect against psychological stress and PBS acquires a modern sound [7].**

The purpose of this work was to determine the impact of length of service and age criteria on the formation of teaching staff in dentists.

**Material and Methods.** The surveyed contingent was formed from 170 primary care physicians (dentist-therapists, dentist-surgeons, orthopedic dentists, and pediatric dentists) of the MO of the dental profile state and non-state healthcare systems. There were 58 (34.1 %) men and 112 (65.9 %) women. All participants were divided into three comparison groups: the first group included 30 (21.58 %) dentists with work experience from 1 to 5 years; the second group had 62 (44.60 %) – from 6 to 10 years; the third group 47 (33.82 %) – more than ten years of work experience. In the control group were 31 ordinary doctors with less than one year of work experience. There were practically no signs of occupational stress.

In this work, we used generally accepted methods for assessing the emotional PBS of dentists (K. Maslach, S. Jackson), Ch. Spielberger's PS test scale (adapted by A. B. Leonova), personal anxiety (PA) by Ch. Spielberger (adapted by Yu. L. Khanin), occupational stress scale (PS), hospital scale for the primary detection of signs of anxiety and depression (Hospital Anxiety and Depression Scale – HADS) [2, 5]. The value  $p < 0.05$  was chosen as the critical level of statistical significance of differences ( $p$ ). Statistical processing was performed using Statistica 10.0 (StatSoft Inc., USA) software packages.

**Results and Discussion.** In the examined dentists, a low PS level (from 5 to 15 points) was noted in 30 (17.64±2.92 %) specialists, and a moderate PS level (from 16 to 30 points) was recorded in 62 (36.47±3.69 %) and a pronounced level of PS (from 31 to 45 points) was diagnosed in 47 (27.65±3.43 %), in the control group had 31 (18.24±2.96 %) doctors. There were single signs similar to the symptoms of occupational stress.

Among the respondents of the first group, with an average age of 28.8 years and an average of 8.3 years of work experience, minor signs of PBS (0–15 points) were observed in 30 doctors. With an average age of the second group of 36.5 years and an average of 16.5 years of work experience, signs of PBS (16–30 points) were detected in 62 dentists. In the third comparison group, the average age was 49.5 years, work experience on average 25.5 years, and symptoms of PBS (31–45 points) were noted in 47 people.

Permanent stress in the majority of the subjects was reflected in several signs and conditions. In most cases (139 dentists – 81.76 %), from 3 to 8 symptoms of a predominantly neurotic nature were noted:

physical, mental, and emotional overwork, apathy – 51 (36.64±4.09 %), sharp mood swings, changes in reactions of excitation and inhibition – 49 (35.25±4.05 %), general weakness, shortness of breath, irritability, nervousness, nausea, vomiting – 43 (30.94±3.93 %), snoring, apnea, sleep disturbances, manifestations of arterial hypertension, arrhythmias, increased heart rate – 40 (28.78±3.84 %), decreased vitality, slight stupor, memory disorders, arduous search for a way out of the current situation – 36 (25.9±4.19 %), increased sweating, dry mouth, thirst, nocturia – 35 (25.18±3.68 %), panic attacks, darkening of the eyes, dizziness, noise in the ears – 33 (23.74±3.61 %), general malaise, conflict, impotence, isolation – 29 (20.86±3.50 %).

Psychological testing of dentists, whose average length of service varied from 5 to 10 years or more, with the determination of personal and situational (reactive) anxiety on the «self-evaluation scale».

The study of the level of anxiety on the «Self-Assessment Scale» revealed a moderate level of PA in the first group; the average value of PA was 36.8 points; in the second group, a high level of PA was detected – the average was 48.6 points, in the third comparison group the level PT was defined as a borderline condition, the average PT was 64.9 points. In the control group, similar testing revealed a low level of PA; the average value of PA was 29.8 points. Data analysis on situational (reactive) anxiety among respondents of comparison groups revealed approximately the same trend in ranking the results with an insignificant variation. The index of situational anxiety (ISA) in the first comparison group had an average value of 35.5 points; in the second comparison group, the average ISA was 45.2 points; in the third group, the average ISA was 61.4 points. In the control group, the average ISA was determined at 30.7 points.

In the comparison groups to identify the level of anxiety and depression (the screening scale HADS), the following results were received. In the first group, the integral indicator was at the upper limit of the norm – 7 points; there are no significant symptoms of depression. In the second group of subjects with a score of 9, the result was interpreted as dysthymia or mild depression. In the third group, which scored 11.8 points, there is clinical depression. In the reference group, a similar indicator was 5 points, indicating no signs of PA and depression.

**Conclusion.** Most dentists – 109 (64.12±3.68 %) had an unfavorable neuropsychological background, interpersonal and personal conflicts, excessive tension, fatigue, and asthenic and borderline mental disorders. Signs of neurosis and autonomic nervous system dysfunction reflected the dynamic conditions of regulatory systems – unstable autonomous reactions, decreased intensity of the stabilization process, and increased response reactivity. Slow adjustment of physiological functioning and a tendency of paroxysmic reactions. Almost all comparative group respondents with more than one year or more of work experience confirmed the negative impact of occupational stress on the intensity of sympathetic response, growth of pathological dysfunction of the autonomic nervous system, and dominant anxiety. Compensatory mechanisms of protection of the nervous system in novice dentists cope with their functions and stop the formation of PBS. In specialists with more than five years of work experience, permanent PS reduces immune-barrier processes;

not only the nervous system is depleted, symptoms of general somatic diseases are increasingly manifested with age. The research results revealed the characteristic

signs of PBS in older dentists with extensive experience in the specialty, their psycho-emotional exhaustion, and physical and nervous overwork.

**Disclosures:** The authors declare no conflict of interest.

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UDC 616-08-039.75

DOI – <https://doi.org/10.14300/mnnc.2023.18045>

ISSN – 2073-8137

## EVALUATION OF SHORT-TERM OUTCOMES IN PRETERM INFANTS WITH NECROTIZING ENTEROCOLITIS

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## ОЦЕНКА НЕПОСРЕДСТВЕННЫХ РЕЗУЛЬТАТОВ ЛЕЧЕНИЯ У НЕДОНОШЕННЫХ ДЕТЕЙ С НЕКРОТИЗИРУЮЩИМ ЭНТЕРОКОЛИТОМ

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The work assessed the impact of the principles of open resuscitation on the results of the treatment of premature infants with NEC. The type of organization of the ICU (open or limited access) did not affect the daily and 7-day mortality. The previous severity of the NEC condition and the nature of the surgical intervention were of primary importance. Significant