

4. Makarov I.V. Mental retardation in children and adolescents. Clinical recommendations (treatment protocol). St. Petersburg, 2015. 30 p. (In Russ.).

5. Khvastunova E.P., Yudin S.A., Vershinin E.G., Delarue V.V. Comparative analysis of the positions of interested social groups as a modern requirement of the sociology of medicine. Doctor-graduate student, 2014, no 2.1 (63), pp. 168–172. (In Russ.).

6. Khvastunova E.P., Delarue V.V. Social adaptation of adolescents with mental retardation: an institutional approach. Volgograd Journal of Medical Research, 2018, no. 2, pp. 3–6. (In Russ.).

7. Psychiatric textbook [Electronic resource] // Online library for students in universities and medical workers URL: <https://auno.kz/uchebnik-po-psixiatrii/154-umstvennaya-otstalost-oligofreniya.html> (date of access: 20.06.2020). (In Russ.).

#### ЛИТЕРАТУРА

1. Деларю, В.В. Специальная психология: учебное пособие / В.В. Деларю, Н.Г. Туровская. – Волгоград: Изд-во ВолГМУ, 2018. – 164 с.

2. Егорова, В.А. Дети как пациенты современной медицинской клиники / В.А. Егорова // Международный

журнал экспериментального образования. – 2017. – № 4-1. – С. 53.

3. Исаев, Д.Н. Умственная отсталость у детей и подростков. руководство / Д.Н. Исаев. – СПб. : Речь, 2003. – 391 с.

4. Макаров, И.В. Умственная отсталость у детей и подростков. Клинические рекомендации (протокол лечения) / И.В. Макаров. – СПб., 2015. – 30 с.

5. Компаративный анализ позиций заинтересованных социальных групп как современное требование социологии медицины / Е.П. Хвастунова, С.А. Юдин, Е.Г. Вершинин, В.В. Деларю // Врач-аспирант. – 2014. – № 2.1 (63). – С. 168–172.

6. Хвастунова, Е.П. Социальная адаптация подростков с умственной отсталостью: институциональный подход / Е.П. Хвастунова, В.В. Деларю // Волгоградский научно-медицинский журнал. – 2018. – № 2. – С. 3–6.

7. Учебник по психиатрии [Электронный ресурс] // Онлайн-библиотека для учащихся в вузах и медицинских работников. – URL: <https://auno.kz/uchebnik-po-psixiatrii/154-umstvennaya-otstalost-oligofreniya.html> (дата обращения: 20.06.2020).

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## THE FRAGMENT OF RESEARCH THE QUALITY OF LIFE AND PROFESSIONAL BURNOUT OF DOCTORS IN CHILDREN'S POLYCLINICS IN VOLGOGRAD

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The level of medical care to patients and the success of the implementation of the national project "Health" depend on the health status and doctor's professionalism. Modern healthcare reform is being implemented by optimizing costs, merging medical organizations, closing ineffective hospitals, expanding the use of high-tech care and informatization of the doctor's activities. All this makes it necessary to assess the health of doctors. Scientists have studied the quality of life and identified the professional (emotional) burnout of doctors in children's clinics in different age groups. Primary care pediatricians have a higher quality of life score when compared to the standard [1]. However, all groups have a high level of professional burnout. The pre-retirement group of doctors has more unfavorable profile. They are highly professional specialists but may experience emotional discomfort because the pension system has been reformed. This situation requires the introduction of preventive work with doctors of this age as a group with great potential and capable of professional longevity.

**Key words:** quality of life (QL), professional (emotional) burnout, pediatrician.

## ФРАГМЕНТ ИССЛЕДОВАНИЯ КАЧЕСТВА ЖИЗНИ И ПРОФЕССИОНАЛЬНОГО ВЫГОРАНИЯ ВРАЧЕЙ ДЕТСКИХ ПОЛИКЛИНИК г. ВОЛГОГРАДА

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Уровень качества оказания медицинской помощи пациентам и успешность реализации национального проекта «Здоровье» напрямую зависит от состояния здоровья и профессионализма врачей. Современное реформирование здравоохранения реализуется путем оптимизации расходов, слияния медицинских организаций, закрытия неэффективных стационаров, расширения использования высокотехнологичных помощи, информатизации деятельности врача. Все это определяет необходимость осуществления оценки самочувствия врачей. Проводилось изучение качества жизни и выявление наличия профессионального (эмоционального) выгорания врачей детских поликлиник в различных возрастных группах. Выявлена высокая оценка качества жизни врачей первичного звена педиатрической службы в сравнении со стандартизированными показателями [1]. При этом во всех группах отмечается высокий уровень профессионального выгорания. Более неблагоприятные показатели характерны для предпенсионной группы врачей, которые, с одной стороны, являются высокопрофессиональными специалистами, с другой стороны, могут испытывать эмоциональный дискомфорт в связи с реформированием пенсионной системы, что требует внедрения профилактической работы с врачами этого возраста, как группы, обладающей большим потенциалом и способной на профессиональное долголетие.

**Ключевые слова:** качество жизни, профессиональное (эмоциональное) выгорание, врач-педиатр.

Doing your duty is a strong deontological principle of professional pediatric practice. After the healthcare reform [4], the medical workload increased and there was a threat that these principles would be implemented due to high physical and psycho-emotional stress and risk of developing professional (emotional) burnout. The problem of emotional burnout is directly related to the QL of medical workers and has a great impact on the quality of all medical care. For doctors and nurses, this is manifested by irritation when communicating with patients, demonstrating their own worth, loss of self-esteem and worries about their professional and personal failure. Numerous studies have proven that healthcare workers are at greatest risk [3]. Especially high risk among primary care pediatricians because in tense conditions associated with responsibility for the patient's life, the factor of communication with parents additionally acts.

After the adoption in 2018 of Federal Law No. 350, the New Pension Reform changed the rules for calculating the retirement age, towards its increase, and consolidated the concept of "pre-retirement age". We assessed the QL and professional burnout of pediatricians with more than 10 years of work experience including pre-retirement and retirement ages.

**Materials and methods:** The results of questionnaire SF-36 and «Assessment of professional burnout» (APB) (Adaptation of «Maslach Burnout Inventory» questionnaire) (MBI) by Vodopyanova N.E., Starchenkova E.S.) [2] were compiled on the information base of the research. The sample consisted of 126 female pediatricians from clinics of Volgograd. Three groups were formed: 36–49 years old, pre-retirement (50–55 years old) and retirement age (56 years and more).

SF-36 is a non-specific quality-of-life (QL) questionnaire. The 36 questions are grouped into eight scales: Physical Functioning, Role-Physical functioning, Bodily Pain, General Health, Vitality, Social Functioning, Role-Emotional and Mental Health. Each scale varies between 0 and 100 where 100 represents complete health. All scales form two main indicators by which the components of population health are assessed: Mental Health and Physical Health.

The questionnaire «Assessment of professional burnout» (APB) contains 22 statements about feelings and experiences associated with performance of work activities. It consists of three scored categories: «emotional exhaustion», «depersonalization» and «reduction of professional achievement». This method is needed

to individually identify signs of burnout and depending on gender and age.

**Results:** the SF-36 questionnaire showed that majority of the respondents had a level of QL assessment in a gradation above the average (Table 1) if compared with the standardized indicators of a population study of the quality of life [1]. There are higher assessments of QL level on at least 6 scales in all age

groups, except for the 35–49 age group, in whom this was observed only in 44.4 %. In general, the most favorable situation is among people of retirement age (84.6 % have excess on 6 scales, 46.1 % on 8 scales). Perhaps this is due to formation of this group of persons with a high level of adaptation and motivation to professional activity which are characterized by professional longevity.

Table 1

**Indicators of scales SF-36**

№	Scale	Value (score) / age		
		36–49	50–55	56 and more
1	Physical Functioning (PF)	77,96 ± 3,34	78,00 ± 6,09	79,23 ± 6,30
2	Role-Physical functioning (RP)	62,96 ± 6,98	71,67 ± 9,41	84,62 ± 6,66
3	Bodily Pain (BP)	70,26 ± 5,10	71,87 ± 7,25	77,62 ± 6,12
4	General Health (GH)	60,56 ± 3,94	56,33 ± 4,82	71,23 ± 6,29
<b>Physical Health</b>		<b>47,30 ± 1,89</b>	<b>46,04 ± 2,30</b>	<b>48,61 ± 2,85</b>
5	Vitality (VT)	54,81 ± 3,89	63,67 ± 5,38	71,15 ± 4,57
6	Social Functioning (SF)	62,30 ± 3,61	77,27 ± 5,09	84,38 ± 4,33
7	Role-Emotional (RE)	66,59 ± 7,35	82,07 ± 7,20	84,46 ± 7,23
8	Mental Health (MH)	56,30 ± 3,81	64,80 ± 5,15	77,54 ± 3,96
<b>Mental Health</b>		<b>41,74 ± 2,12</b>	<b>48,51 ± 2,10</b>	<b>53,01 ± 1,65</b>

Comparison of QL in the age groups of 36–49 year old doctors and the group of pre-retirement ages revealed the features: a higher level of social functioning in persons of pre-retirement age ( $p < 0.05$ ).

If we compare the groups of 35–49 years old and pensioners, it was revealed that the indicators of 4 scales are significantly higher among pensioners: Role-Physical functioning ( $p < 0.05$ ), Vitality ( $p < 0.01$ ), Social Functioning ( $p < 0.01$ ), and Mental Health ( $p < 0.01$ ). This may be due to the fact that pensioners who have remained to perform their

professional functions have a high level of motivation and professional priorities.

We identified the dynamics of changes in the physical and psychological components of health, which showed the expected inversion of the dominant parameter in assessing the quality of life. Over the years, physical health is inferior to psychological health (Fig. 1).

The analysis of professional (emotional) burnout was conducted from an age perspective and according to the prevalence in the study groups and the integral indicator of burnout (Table 2).

Table 2

**Distribution of professional burnout scales by age group, %**

Age	Level of burnout	Distribution (person/level)			Integral indicator of burnout
		Emotional exhaustion	Depersonalization	Reduction of professional achievement	
36–49	Low	33,3	0	37	8,48 ± 0,53
	Medium	11,1	25,9	48,1	
	High	44,4	18,5	11,1	
	Very high	11,1	55,5	3,7	
50–55	Low	26,4	0	52,8	9,13 ± 0,56
	Medium	19,8	13,2	33	
	High	39,6	39,6	13,2	
	Very high	13,2	46,2	0	
56 and more	Low	69,3	7,6	61,6	7,15 ± 0,53
	Medium	23,1	30,8	30,8	
	High	7,6	30,8	0	
	Very high	0	30,8	7,6	

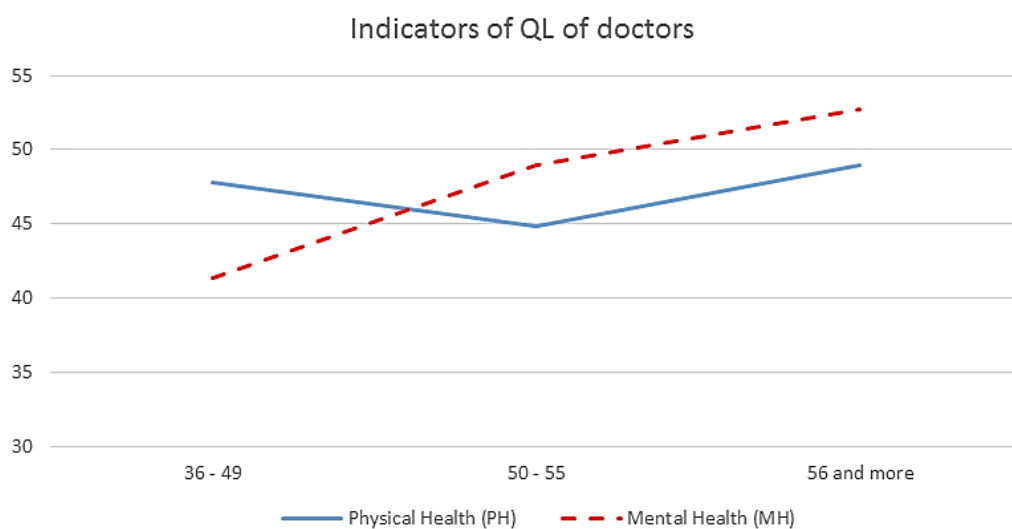


Fig. 1. Indicators of QL of doctors

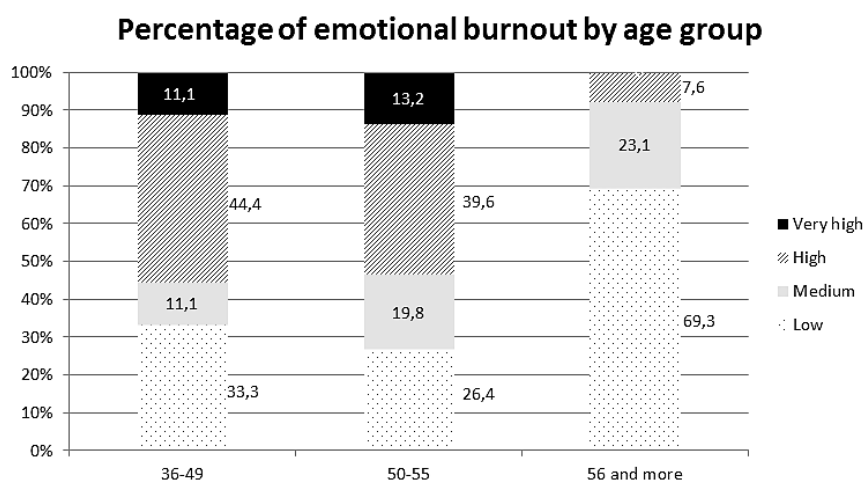


Fig. 2. Levels of emotional burnout in different age groups

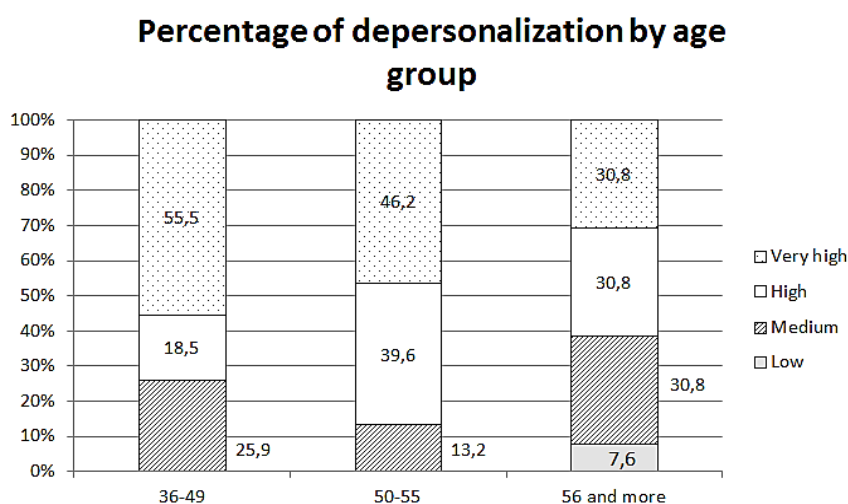


Fig. 3. Levels of depersonalization in different age groups

**Percentage of reduction of professional achievement by age group**

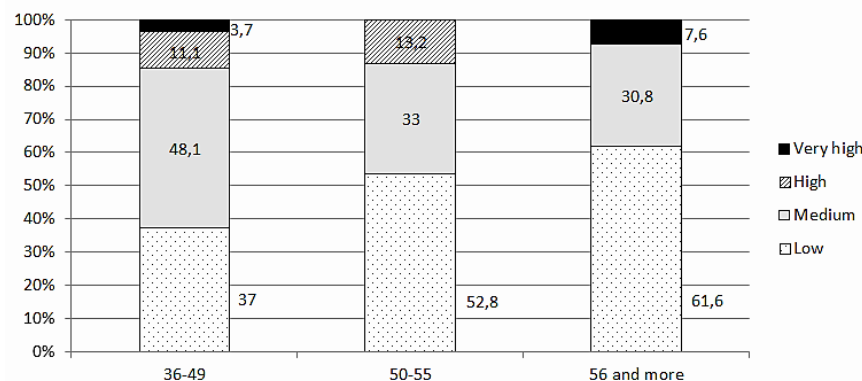


Fig. 4. Levels of reduction of professional achievement in different age groups

Retired pediatricians have a significantly lower level of emotional exhaustion in comparison with the group of 35–49 years old ( $p < 0.05$ ) and persons of pre-retirement age ( $p < 0.01$ ).

When analyzing the data in general, there are high and very high levels of depersonalization. A high level of depersonalization is a defensive reaction for a rational assessment of the situation without emotions. At the same time, depersonalization is characterized by the presence of an emotional buffer between the patient and the doctor.

People of retirement age have the lowest level of depersonalization, which indicates less detachment (Fig. 3).

The index of reduction of professional achievements is low in all age groups with a tendency to strengthen with age (Fig. 4).

The integral indicator of burnout in all age groups was at a high level with a peak in the pre-retirement age group (9.13) and a significant decrease in the group of pensioners ( $p < 0.05$ ).

Correlation analysis of the burnout and QL scales revealed an average inverse between emotional exhaustion and the values of Physical Functioningscale ( $r = -0.59$ ), Role-Physical functioning ( $r = -0,57$ ), Bodily Pain ( $r = -0,67$ ), General Health ( $r = -0,55$ ), Social Functioning ( $r = -0,62$ ), Mental Health ( $r = -0,63$ ) and Vitality ( $r = -0,76$ ).

**Conclusion.** The results of the study show that the QL of pediatricians of retirement and pre-retirement age is above the average level. However, all groups have a high level of professional burnout. The most unfavorable indicators of professional burnout are observed in the pre-retirement age group. Groups of retirement and pre-retirement age consist mainly of highly qualified specialists. In the modern life of society, they are able to extend the period of their professional longevity if the supervisory authority

begins to introduce preventive measures to protect mental health and optimize working conditions.

REFERENCES

1. Admiradjanova V.N., Goryachev D.V., Korshunov N.I. et al. SF-36 questionnaire population quality of life indices. Scientific and practical rheumatology, 2008, no. 1. (In Russ.).
2. Vodopyanova N.E., Starchenkova E.S. Burnout syndrome: diagnosis and prevention. 2nd ed. St. Petersburg, 2009. 336 p. (In Russ.).
3. Donika A.D., Ajvazyan Sh.G. Etiology of professional stress of a therapist. International Journal of Experimental Education, 2015, no. 3-2, pp. 114–115. (In Russ.).
4. Donika A.D. Modern trends in the study of the problem of professionogenesis on the model of medical specialties. Human Ecology, 2017, no. 2, pp. 52–57. (In Russ.).
5. Zholid' D.S. Bioethical content of «good» in modern medical practice. International Journal of Experimental Education, 2017, no. 4-1, p. 54. (In Russ.).
6. Kobayakova O.S., Deev I.A., Kulikov E.S. et al. Burnout of physicians in the Russian Federation modeled by the Tomsk region. Preventive medicine, 2018, no. 6, pp. 68–73. (In Russ.).
7. Slivina L.P., Levitan B.N., Skvortsov V.V. et al. Infection control problem in primary health care institutions (on the example of a dental clinic). Science magazine «Nurse», 2020, vol. 22, no. 6, pp. 34–41. (In Russ.).
8. Donika A. Sociological studies in medicine: bioethical content (russian experience). Medicine and Law, 2018, vol. 37, no 2, pp. 315–326.

ЛИТЕРАТУРА

1. Популяционные показатели качества жизни по опроснику SF-36 (результаты многоцентрового исследования качества жизни «МИРАЖ» / В.Н. Амирджанова, Д.В. Горячев, Н.И. Коршунов [и др.] // Научно-практическая ревматология. – 2008. – № 1.
2. Водопьянова, Н.Е. Синдром выгорания: диагностика и профилактика / Н.Е. Водопьянова, Е.С. Старченкова. – 2-е изд. – СПб. : Питер, 2009. – 336 с.

3. Доника, А.Д. Этиология профессионального стресса врача-терапевта / А.Д. Доника, Ш.Г. Айвазян // Международный журнал экспериментального образования. – 2015. – № 3-2. – С. 114–115.

4. Доника, А.Д. Современные тенденции исследований проблемы профессиогенеза на модели медицинских специальностей / А.Д. Доника // Экология человека. – 2017. – № 2. – С. 52–57.

5. Жолудь, Д.С. Биоэтическое содержание «блага» в современной медицинской практике / Д.С. Жолудь // Международный журнал экспериментального образования. – 2017. – № 4-1. – С. 54.

6. Профессиональное выгорание медицинских работников в Российской Федерации на модели Томской области / О.С. Кобякова, И.А. Деев, Е.С. Куликов [и др.] // Профилактическая медицина. – 2018. – № 6. – С. 68–73.

7. Проблема инфекционного контроля в учреждениях первичной медико-санитарной помощи (на примере стоматологической поликлиники) / Л.П. Сливина, Б.Н. Левитан, В.В. Скворцов [и др.] // Медицинская сестра. – 2020. – Т. 22, № 6. – С. 34–41.

8. Donika, A. Sociological studies in medicine: bioethical content (russian experience) / A. Donika // Medicine and Law. – 2018. – Vol. 37, no. 2. – P. 315–326.