

ORGANIZATION OF HEALTH, MEDICAL SCIENCE AND EDUCATION

D.A. Tolmachev, D.A. Son, M.A. Ivanova, N.M. Popova

THE CURRENT STATE OF THE FUNCTIONAL DIAGNOSTICS DOCTORS STAFFING IN THE RUSSIAN FEDERATION AND ITS SUBJECTS (2012-2017)

Abstract. Staffing issues are one of the main health problems. The *aim* of the study was to analyze the current situation in the provision of functional diagnostics by doctors in the Russian Federation and its subjects. *Material and methods:* the method of descriptive statistics was used to analyze the data of Federal statistical observation №30 "Data on medical organization" in the context of the subjects of the Federation for the period from 2012 to 2017. *Results* of the study: during the analyzed period, the availability of functional diagnostics by doctors providing outpatient care, despite the almost stable value of the indicator (on average 0.36 per 10,000 population), had some tendency to increase. Ranking of subjects of the country by the level of security showed that both at the beginning and at the end of the analyzed period the top ten were the republics of Chuvashia and Mordovia, St. Petersburg, Khanty-Mansiysk Autonomous Okrug, Orenburg region, Trans-Baikal and Altai territories. *Conclusion:* in the whole country and its constituent entities of the Federation there is a low provision of outpatient departments with doctors of functional diagnostics, although in most of them there is a positive dynamics of the indicator.

Keywords: doctors of functional diagnostics, staffing, medical organizations, indicators, trends.

Introduction. One of the main priorities of health care and the Government as a whole is to ensure the quality and accessibility of health care in order to maintain and improve the health of the population [2-4]. In this regard, the provision of medical organizations with personnel and the rational cost of working time of medical specialists is the relevance of the problem [5, 6, 8, 9]. However, it is not always possible to implement new labor standards due to the lack of financial capacity of medical organizations [1, 7, 10, 11].

Aim of research: analysis of the current situation on the provision of doctors with functional diagnostics in the Russian Federation and its subjects.

Material and methods. The method of descriptive statistics was used to analyze the data of the Federal statistical observation №30 "Information about the medical organization" in the context of the subjects of the Federation for the period from 2012 to 2017.

Results and discussion. Functional diagnostics in the practice of any special-

ist doctor is important for diagnosis verification. In this regard, the availability of specialists in this field is one of the urgent problems of practical health care. To assess the rationality of the use of human resources and their activities, we analyzed the data of the official statistical observation on the availability of functional diagnostics by doctors for the period from 2012 to 2017.

The results of the study showed that during the analyzed period of time, the provision of functional diagnostics doctors providing medical care in outpatient settings in the Russian Federation, despite the almost stable value of the indicator (on average 0.36 per 10 000 population), had some tendency to increase (+2.7% for 2015-2017) (Table).

While year-to-year growth rate of doctors of functional diagnostics was in the interval of 0.28% to 0.45%. The analysis of the provision of doctors with functional diagnostics in the context of the subjects of the Russian Federation indicates a higher increase in the provision of specialists in such subjects as the Penza region (300.0%), Jewish Autonomous district (233.3%), the Republic of Tyva and Altai (200.0%), Magadan (130.8%) and Tambov (117.4%) regions. Negative growth was observed in 13 regions of the country, especially in the Republics of Adygea (-44.4%), Chuvashia (-24.1%), Nizhny Novgorod region (-16.7%) and Moscow (-15.3%).

Our ranking of subjects of the country according to the level of provision of functional diagnostics by doctors for

2012 and 2017, showed that both at the beginning and at the end of the analyzed period, the top ten were the republics of Chuvashia and Mordovia, St. Petersburg, Khanty-Mansi Autonomous district, Orenburg region, TRANS-Baikal and Altai territories. In the first place in 2012 was the Republic of Chuvashia, in 2017 – the Republic of Karelia. The Republic of Adygea, the Chechen Republic and the Kurgan region have the lowest availability of specialists.

Functional studies are important in all areas of health care. In some cases, without the necessary functional studies it is impossible to establish the correct diagnosis. However, not all medical organizations have consistently high availability of these specialists. In this regard, the analysis of the availability of functional diagnostics by doctors is one of the urgent problems of practical health care. This is necessary for planning both the Program of state guarantees, as well as improving the quality and timeliness of medical care. The results of this study indicate a shortage of personnel in the field of functional diagnostics, which requires organizational decisions on rational training.

Conclusion. In general, in the Russian Federation and its regions there is a low staffing by functional diagnostics doctors providing medical services on an outpatient basis, although in most of them there is a positive dynamics of the indicator. However, in 15.3% of the subjects, against the background of low availability of medical specialists, there is a negative increase in the indicator.

ФГБУ "ЦНИИОИ" Минздрава России, г. Москва: **ТОЛМАЧЕВ Денис Анатольевич** – к.м.н., доцент, докторант, truth84@mail.ru, ORCID 0000-0002-4106-8904, **СОН Ирина Михайловна** – д.м.н., проф., зам. директора по научной работе, son@mednet.ru, ORCID: 0000-0001-9309-2853, **ИВАНОВА Маиса Афанасьевна** – д.м.н., проф., зав. отд. maisa961@mail.ru, ORCID: 0000-0002-7714-7970; **ПОПОВА Наталья Митрофановна** – д.м.н., проф., зав. кафедрой ИГМА Минздрава России, г. Ижевск, kafedra-ozz@mail.ru, ORCID 0000-0002 5049-3638.

Staffing of outpatient departments of medical organizations with doctors of functional diagnostics in the Russian Federation and in its Federal districts for the period 2012-2017 (per 10 000 population, the rate of increase/decrease in %)

Russian Federation subject	2012	2013	2014	2015	2016	2017	2017/2012
Russian Federation	0,34	0,35	0,37	0,37	0,38	0,38	10,6
Central federal district	0,39	0,4	0,4	0,39	0,39	0,4	2,3
North-West Federal district	0,37	0,39	0,42	0,44	0,45	0,46	24,1
Southern Federal district	0,36	0,36	0,4	0,41	0,41	0,41	13,3
North Caucasus Federal district	0,31	0,3	0,38	0,39	0,38	0,37	19,7
Volga federal district	0,29	0,3	0,35	0,35	0,37	0,38	31,6
Ural Federal district	0,31	0,33	0,34	0,34	0,35	0,34	9,5
Siberian Federal district	0,28	0,29	0,28	0,3	0,31	0,32	12,9
Eastern federal district	0,24	0,24	0,27	0,24	0,28	0,27	12,6

References

1. Стародубов В.И., Иванова М.А., Бантьева М.Н., Соколовская Т.А., Армашевская О.В. Деятельность и обеспеченность специалистами первичного звена. *Российский медицинский журнал*. 2014; 6: 4-7. [Starodubov VI, Ivanova MA, Bant'eva MN, Sokolovskaya TA, Armashevskaya OV. Activity and staffing of primary care specialists. *Rossiiskij medicinskij zhurnal*. 2014; 6: 4-7. (In Russ.).]
2. Иванова М.А. Нормирование труда – один из путей оптимизации качества оказания медицинской помощи больным. *Социальные аспекты здоровья населения*. 2007; 4: 6. [Ivanova MA. Labor rationing is one of the ways to optimize the quality of medical care for patients. *Sotsial'nye aspekty zdorov'ya naseleniya*. 2007; 4: 6. (In Russ.).]
3. Иванова М.А. Нормирование труда – как главный инструмент формирования штатного расписания амбулаторно-поликлинических учреждений. *Современные проблемы здравоохранения и медицинской статистики*. 2014; 1: 2-14. [Ivanova MA. Rationing of labor-as the main tool of formation of the staff schedule of out-patient and polyclinic institutions. *Sovremennye problemy zdavoohraneniya i medicinskoj statistiki*. 2014; 1: 2-14. (In Russ.).]
4. Иванова М.А. Рекомендованные штатные нормативы – не документы «прямого действия». *Экономика ЛПУ в вопросах и ответах*. 2016; 1: 12-16. [Ivanova MA. Recommended staff standards - not documents of direct action. *Ekonomika LPU v voprosakh i otvetakh*. 2016; 1: 12-16. (In Russ.).]

5. Иванова М.А. Нормирование труда врача-эндокринолога. *Здравоохранение*. 2016; 2: 52-55. [Ivanova MA. Endocrinologist labor regulation. *Zdravoohranenie*. 2016; 2: 52-55. (In Russ.).]

6. Михайлова Е.И. Подходы к организации управления трансформационными процессами в непрерывном профессиональном образовании педагогов. *Образование через всю жизнь: непрерывное образование в интересах устойчивого развития*. 2016; 14: 110-117. [Mihajlova EI. Approaches to the organization of management of transformation processes in continuous professional education of teachers. *Obrazovanie cherez vsyu zhizn': nepreryvnoe obrazovanie v interesah ustojchivogo razvitiya*. 2016; 14: 110-117. (In Russ.).]

7. Никитин Ю.П. Как была создана кардиологическая служба в Новосибирске. *Сибирский медицинский журнал* (г. Томск). 2017; 32(3): 108-110. [Nikitin YP. How was the cardiology service established in Novosibirsk. *Sibirskij medicinskij zhurnal* (g. Tomsk). 2017; 32(3): 108-110. (In Russ.).]

8. Сон И.М., Шипова В.М., Иванова М.А., Армашевская О.В., Бантьева М.Н., Люцко В.В., Соколовская Т.А., Гажева А.В., Леонов С.А. Нормирование труда врачей амбулаторного приема при

оказании первичной медицинской помощи. *Здравоохранение*. 2014; 7: 76-85. [Son IM., Shipova VM., Ivanova MA., Armashevskaya OV., Bant'eva MN., Lyucko VV., Sokolovskaya TA., Gazheva AV., Leonov SA. Rationing of work of doctors of out-patient reception at rendering primary medical care. *Zdravoohranenie*. 2014; 7: 76-85. (In Russ.).]

9. Стародубов В.И. Сохранение здоровья работающего населения – одна из важнейших задач здравоохранения. *Медицина труда и промышленности*. 2005; 1: 1-7. [Starodubov VI. Preserving the health of the working population is one of the most important tasks of health care. *Medicina truda i promyshlennosti*. 2005; 1: 1-7. (In Russ.).]

10. Стародубов В.И. Итоги и перспективы развития приоритетного национального проекта в сфере здравоохранения. *Менеджер здравоохранения*. 2007; 1: 4-9. [Starodubov VI. Results and prospects of development of the priority national project in the field of health. *Menedzher zdavoohraneniya*. 2007; 1: 4-9. (In Russ.).]

11. Стародубов В.И., Хальфин Р.А., Какорина Е.П. О задачах по реализации национального проекта в сфере здравоохранения. *Здравоохранение*. 2005; 12: 15. [Starodubov VI., Hal'fin RA., Kakorina EP. About tasks of implementation of the national project in the field of health care. *Zdravoohranenie*. 2005; 12: 15. (In Russ.).]

Information about authors

Tolmachev Denis Anatolevich – candidate of medical Sciences, associate Professor, doctor of Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation. Dobrolyubova str. 11, Moscow, 127254. Phone: 8(904)315-28-19. E-mail: truth84@mail.ru. ORCID 0000-0002-4106-8904.

Son Irina Mikhailovna –doctor of medical Sciences, Professor, Deputy Director on scientific work of Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation. Dobrolyubova str. 11, Moscow, 127254. Phone: 8(495)639-60-40. E-mail: son@mednet.ru. ORCID: 0000-0001-9309-2853.

Ivanova Maisa Afanasevna – Doctor of medical Sciences, Professor, head of Department of "Standardization of medical workers", Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation. Dobrolyubova str. 11, Moscow, 127254. Phone: 8(916)304-61-17. E-mail: maisa961@mail.ru. ORCID: 0000-0002-7714-7970.

Popova Natalia Mitrofanovna – Doctor of medical Sciences, Professor, head of the Department of public health and public health at Izhevsk State Medical Academy of the Ministry of health of Russia. Communards str. 281, Izhevsk, 426034. Phone: 8(3412)91-82-93. E-mail: kafedra-ozz@mail.ru. ORCID 0000-0002-5049-3638.