



RESULTS OF ROUTINE MEDICAL EXAMINATIONS OF THE CHILDREN'S POPULATION OF THE RUSSIAN FEDERATION IN 2014

© A.A. Baranov¹, L.S. Namazov-Baranova¹, R.N. Terletsky¹, E.V. Antonova¹, N.V. Ustinova¹, E.N. Baybarina², O.V. Chumakova²

¹FGAU "Scientific Center of Children's Health", Ministry of Healthcare of the Russian Federation, Moscow, Russia;

²Ministry of Healthcare of the Russian Federation, Moscow, Russia

For citation: *Pediatrician (St. Petersburg)*, 2017;8(1):33-39

Received: 28.11.2016

Accepted: 28.01.2017

The relevance of this research was determined by the need for enhancement and increase in the efficiency of routine medical examinations of minors in the Russian Federation. The information and statistical materials of medical examination of the children's population in 2014 in terms of the health of various age groups in a section of federal districts and subjects were studied. The following indicators were studied: coverage of the children's population by routine medical examination; level and structure of the revealed general and primary morbidity; frequency of dispensary registration; need for additional consultations; and researches and treatment in an outpatient clinic, a day hospital, a hospital with round-the-clock services, and sanatorium organizations as well as coverage by these medical services. A high level of coverage of minors by routine medical examinations was registered. More than one-third of the healthy children's population passed the medical examination. The revealed general and primary morbidity of the children's population in more than one-third of subjects is above mean Russian levels. Diseases of the respiratory organs, bone, and muscular and nervous systems are the most common among children, whereas diseases of the bone and muscular system, eyes, and respiratory organs are common among teenagers. Despite the high prevalence of chronic diseases among the children's population, recommendations for treatment and rehabilitation were given insufficiently during routine medical examinations. Regional characteristics of the medical examination results, which allowed for the identification of the most disadvantaged areas and defects in its organization and the lack of continuity between medical institutions providing this type of service, have been established.

Keywords: routine medical examinations; medical examination; children's population; groups of health; morbidity; disability; prevention.

ИТОГИ ПРОФИЛАКТИЧЕСКИХ МЕДИЦИНСКИХ ОСМОТРОВ ДЕТСКОГО НАСЕЛЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ В 2014 ГОДУ

© А.А. Баранов¹, Л.С. Намазова-Баранова¹, Р.Н. Терлецкая¹, Е.В. Антонова¹, Н.В. Устинова¹, Е.Н. Байбарина², О.В. Чумакова²

¹ФГАУ «Научный центр здоровья детей» Минздрава России, Москва;

²Минздрав России, Москва

Для цитирования: *Педиатр.* – 2017. – Т. 8. – № 1. – С. 33–39. doi: 10.17816/PED8133-39

Поступила в редакцию: 28.11.2016

Принята к печати: 28.01.2017

Актуальность исследования определялась необходимостью совершенствования и повышения эффективности профилактических медицинских осмотров несовершеннолетних Российской Федерации. Изучались информационно-статистические материалы профилактических медицинских осмотров детского населения 2014 г., касающиеся здоровья различных возрастных групп в разрезе федеральных округов и субъектов. Проанализированы показатели охвата детского населения профилактическими медицинскими осмотрами, распределение по группам здоровья, уровень и структура выявленной общей и первичной заболеваемости, частота постановки на диспансерный учет, нуждаемость в дополнительных консультациях, исследованиях и лечении в условиях амбулатории, дневного

стационара, стационара круглосуточного пребывания, санаторно-курортных организаций, а также охват данными медицинскими услугами. Зарегистрирован высокий уровень охвата несовершеннолетних профилактическими медицинскими осмотрами. Доля здорового детского населения составляла более одной трети от всех прошедших указанные осмотры. Выявленная общая и первичная заболеваемость детского населения в значительной части (более одной трети) субъектов имеет уровень выше российского. Основными причинами заболеваемости у детей являются болезни органов дыхания, костно-мышечной и нервной систем, у подростков – болезни костно-мышечной системы, глаза и его придаточного аппарата и органов дыхания. Высокая распространенность хронической патологии среди детского населения при профилактических медицинских осмотрах не сопровождалась достаточным объемом рекомендаций по лечению и реабилитации. Региональные особенности полученных результатов позволили выделить наиболее неблагополучные территории, выявить дефекты в ее организации и отсутствие преемственности между медицинскими учреждениями, оказывающими данный вид услуг.

Ключевые слова: профилактические медицинские осмотры; диспансеризация; детское население; группы здоровья; заболеваемость; инвалидность; профилактика.

INTRODUCTION

The preventive direction in protecting population health using dispensary method is a priority in Russian health care [1-3, 5].

Children belong to the population group that is subject to mandatory preventive monitoring in accordance with the approved procedure for its conduct. According to the order of the Ministry of Health of the Russian Federation No. 1346n (December 21, 2012), “The procedure for medical examinations of minors, including admission to educational institutions and during their studies in them,”¹ in 2014, the preventive medical examination of pediatric population was performed in 83 constituent entities of the Russian Federation (RF). The preventive medical examinations performed were a complex of medical interventions aimed at revealing pathological conditions, diseases, and risk factors for their development. The conceptual management of the preventive medical examination of the population is based on the combination of theoretical concepts and a new paradigm for health improvement of the population [4].

The aim of the study is to evaluate the quality of preventive medical examinations of minors in the RF.

MATERIALS AND METHODS

The object of the study was the pediatric population aged 0-17 years. Data from report form No. 030PO/o12 titled “Information on preventive medical examinations of minors” of the entire RF in the context of its federal districts (FDs) and constituent entities were analyzed. The pediatric population was divided into 0-14 and 15-17 age groups.

The indicators of the coverage of preventive medical examinations in pediatric population were studied, such as the distribution by health groups, level and structure of the identified general and primary morbidities, frequency of registration in dispensary for diseases, need for additional consultations, and studies and treatment in an outpatient setting, day-patient department, 24-hour stay hospital, or therapeutic resort organizations, as well as the coverage of these health services.

The study was performed with the support of the State Contract of the Ministry of Health of the Russian Federation No. K27NIR/126 for the implementation of scientific and research developments titled “Development of a methodology for assessing the quality of conducting preventive medical examinations of minors in the Russian Federation.”

There are no conflicts of interest to declare.

RESULTS

A total of 16,527,812 children aged 0-17 years were subject to preventive medical examination in 2014. Of these, 14,204,440 (85.9%) were aged 0-14 years and 2,323,372 (14.1%) were aged 15-17 years. The total number of pediatric population who underwent these examinations was 15,962,850; 13,667,964 (85.6%) children and 2,294,886 (14.4%) adolescents. Consequently, 96.6% of the RF pediatric population underwent preventive medical examinations; the proportion of children aged 0-14 years (96.2%) who underwent these examinations was slightly lower than that in adolescents aged 15-17 years (98.8%).

A similar situation was noted in almost all FDs of the RF, except for the Northwestern and Far Eastern FDs, where the coverage with preventive medical examinations of the adolescent population was less than that of the population aged 0-14 years.

Of the 83 constituent entities of the RF, 26 (31.3%) did not have a full (100%) coverage with preventive medical examinations of minors. The Chechen Re-

¹ Order of the Ministry of Health of the Russian Federation of 12/21/2012 No 1346n “The procedure for medical examinations of minors, including admission to educational institutions and during their studies in them.” Available at: <http://base.garant.ru/70355102/>.

Table 1

Distribution of children aged 0-17 years by health groups in the federal districts of the Russian Federation, 2014 (%)*

Таблица 1

Распределение детей в возрасте 0–17 лет по группам здоровья в федеральных округах РФ, 2014 г. (%)*

Territories	Group 1	Group 2	Group 3	Group 4	Group 5
Russian Federation	32.7	52.9	12.8	0.6	0.6
Central Federal District	38.6	48.2	11.9	0.7	0.8
Northwestern Federal District	20.2	61.0	17.4	0.6	0.7
Southern Federal District	38.7	48.2	11.5	0.6	0.8
North Caucasian Federal District	30.5	50.1	14.4	1.0	1.2
Volga Federal District	26.3	59.0	13.2	0.7	0.8
Ural Federal District	33.9	52.9	12.1	0.5	0.6
Siberian Federal District	32.2	53.2	13.6	0.6	0.4
Far Eastern Federal District	31.1	58.2	9.5	1.2	0.6

Примечание: * отсутствие в сумме 100 % также свидетельствует о дефектах регистрации.
Note: * absence of 100% in total also indicates a registration failure

public (79.5%); Kurgan region (76.5%); Republic of Ingushetia (73.6%); Karelia (70.5%), Samara (70%), and Kemerovo (61.7%) regions and Kamchatka Territory (51.4%) were at most disadvantage in this regard (coverage less than 80%).

Exceeding the indicator of coverage with preventive medical examinations of the pediatric population by 100% indicates registration defects or lack of continuity between the medical institutions that render this type of services in these territories. Apparently, repeated visits were incorrectly treated as primary morbidity, but one child probably underwent these examinations in different medical institutions.

The distribution by health groups is one of the indicators of the health status of the pediatric population. In 2014, health group I was established in one-third of the children (32.7% of cases), health group II in 52.9%, 12.8% of children had chronic diseases, and 1.2% of children had a disability (Table 1).

The proportion of children in health group I was slightly higher than that of the Russian level only in the Central, Southern, and Ural FDs. The lowest indices of the specific weight of healthy children were registered in the Northwestern and Volga FDs. Accordingly, the same regions had higher (above the Russian level of 52.9%) proportions of children with functional disorders (health group II). The frequency of chronic pathology (health group III) ranged from 9.5% in the Far Eastern to 17.4% in the Northwestern FDs. Four regions (Northwestern, North Caucasian, Volga, and Siberian FDs) exceeded the Russian level.

There were significant variations in the number of healthy children in the constituent entities of the – RF, which range from 8.5% in St. Petersburg to 67.5% in the Sakha (Yakutia) Republic, children with

functional disorders range from 27.9% in the Moscow region to 72% in the Altai Republic, and those with chronic pathology range from 3.4% in the Tyva Republic to 31.2% in the Chukotka Autonomous District.

The proportion of children in health group I below the Russian level was 50.6% that of the constituent entities of the RF. They include Kurgan (14.1%), Ivanovo (15.6%), Nizhny Novgorod (17.3%), Vologda (18.4%), Tver (19%), and Samara (19.9%). Undoubtedly, this range of indicators is determined by the diagnostic capabilities and accessibility of medical care at the regional level.

In the course of preventive medical examinations, 11,601,783 cases of diseases were identified, which amounts to 72,679.9 per 100,000 examined children at the age of 0-17 years. Of these, there were 9,124,512 (78.6%) children aged 0-14 years and 2,528,199 (21.4%) adolescents aged 15-17 years, and their morbidity was 66,758.4 and 110,166.6 per 100,000 examined children, respectively. Those with primary morbidity were 22,760.8; 21,319.3; and 31,990.2, respectively. Thus, the general and primary morbidities increased significantly with age, $p < 0.05$.

The general and primary morbidities in children aged 0-17 years above the Russian level is registered in the North Caucasus, Volga, and Ural FDs, whereas only general morbidity in the Northwestern FD and primary morbidity in the Siberian FD (Table 2).

Attention should be paid to the low level of general and primary morbidities in the Far Eastern FD, for which unfavorable tendencies in the health status of children are traditionally typical. To determine the

Table 2
Morbidity of children aged 0-17 years in the federal districts of the Russian Federation, 2014 (per 100 thousand examined)
Таблица 2
Заболеваемость детей в возрасте 0–17 лет в федеральных округах РФ, 2014 г. (на 100 тыс. осмотренных)

Territories (rating)	Registered diseases	
	Total	Newly revealed
Russian Federation	72,679.9	22,760.8
Central Federal District (5)	67,440.7	18,441.4
Northwestern Federal District (3)	89,638.0	20,560.7
Southern Federal District (7)	54,233.6	18,116.3
North Caucasian Federal District (2)	92,244.6	29,823.6
Volga Federal District (4)	80,276.5	23,448.0
Ural Federal District (1)	98,609.5	33,252.6
Siberian Federal District (6)	59,465.3	26,421.2
Far Eastern Federal District (8)	49,475.6	16,193.1

reasons for this discrepancy, a spatial analysis is necessary. Although to a lesser extent, a similar picture was observed in the Southern FD.

High levels of general morbidity in children of this age group were registered in 44.6% of the constituent entities. The most unfavorable in this respect were the Kurgan, Vologda, Samara, and Murmansk regions and the Republic of Mordovia, where this indicator exceeded the Russian level twice or higher.

High morbidity rates were detected in 37.3% of the territories and first detected among children aged 0-17 years. In the Kurgan, Saratov, and Vologda regions, and the Republics of Mordovia, Altai, and Ingushetia, these figures exceeded the Russian level twice or higher.

The rank distribution of the causes of the general morbidity of children in this age group revealed that diseases of the musculoskeletal system (due to kyphosis, lordosis, and scoliosis; 15.7%), respiratory organs (14.1%), and nervous system (10.8%) were on the first place. Further, in descending order, they are followed by digestive system diseases, diseases of the eyes and their appendages, endocrine system disorders, congenital malformations, genitourinary system disorders, diseases of the skin and subcutaneous tissue, blood circulatory system disorders, diseases of the blood and hemopoietic organs, mental and behavioral disorders, and diseases of ears and the mastoid process. The remaining causes accounted for <1% in the structure of general morbidity.

The structure of the causes of morbidity in children aged 0-17 years, revealed for the first time, was

slightly different. Hence, the first places were occupied by diseases of the respiratory system (17.7%), musculoskeletal system (13.1%), and digestive organs (11.7%). Furthermore, the classes of diseases were approximately positioned in the same order as in the case of general morbidity; the diseases of eyes and their appendages in both cases were in the fifth place, and the remaining causes varied within one ranking place.

In the course of preventive medical examinations in 2014, 220,682 (1.4%) of the disabled children aged 0-17 years were registered in the RF, which is 1,382.5 per 100 thousand examined children. They included 18,705 (0.12%) children (117.2 per 100,000) with the disability established for the first time during the preventive medical examinations. The analysis showed that compared to that in Russian level the prevalence of general morbidity was higher in the North Caucasian Federal District (3719.5), whereas prevalence of primary morbidity was higher in the North Caucasian (420.2) and Volga (122.8) districts. Attention should be drawn to the very low level of newly diagnosed disability in the Northwestern (29.6), Southern (38.4), Ural (60.4), and Far Eastern (46.2) FDs.

The general disability exceeded the RF indicators in 32.5% of the constituent entities of the RF and the primary morbidity in 28.9% of the territories. The Chechen Republic had very high prevalence of general disability among children aged 0-17 years. The Republics of Ingushetia, Mari El, and Dagestan and Kurgan and Samara regions exceeded the Russian level by 1.5-2 times or higher. In these areas

and in the Novgorod region and Krasnoyarsk Territory, high levels of newly diagnosed disability were noted.

A total of 35.2% of children entered in the dispensary records after carrying out preventive medical examinations at 35,237.7 per 100 thousand examined children. They included 32% of children aged 0-14 years (31,986.4 per 100 thousand examined ones) and 56% of adolescents aged 15-17 years (56,042.1).

The highest number of cases registered in the dispensary for all age groups was noted in the same five FDs: Northwestern, Southern, North Caucasian, Volga, and Ural FDs. The highest number of cases registered according to the examination results (i. e., for the first time) was in the Southern, North Caucasian, and Ural FDs.

In 54.2% of the territories, the frequency of dispensary registering children aged 0-17 years exceeded the Russian level. The maximum values were registered in the Republic of Karelia, Murmansk region, Republic of Dagestan, Vologda region, and Jewish Autonomous Region.

In the structure of the reasons for registering for clinical supervision, the first ranked places were occupied by the diseases of the nervous, musculoskeletal, and respiratory systems for children aged 0-17 and 0-14 years and the diseases of eyes and their appendages, musculoskeletal, and endocrine systems for those aged 15-17 years. The results of preventive medical examinations revealed that 1,740,269 children aged 0-17 years needed additional consultations, studies on an outpatient basis, and in a day hospital, i. e., 10.9% of the number of those who underwent preventive examinations. A total of 118,847 (0.7%) children needed additional consultations and studies under inpatient conditions. The unequal need for this kind of services was established; thus, the highest need was in the North Caucasian (19.6%) and Ural (18.8%) FDs, while the lowest was in the Northwestern FD (7.4%).

The North Caucasian FD (3.7%) had the highest need for inpatient facility examination, and it exceeded that in other FDs by several times. On the contrary, in the Southern and Ural FDs, this need was minimal at only 0.1%.

It was revealed that additional consultations and studies in the entire Russia were conducted in 68.9% of outpatient cases and 80.4% of inpatient cases. At the same time, the lowest coverage with the necessary outpatient studies took place in the Southern (48.5%) and Ural (49.5%) FDs and that with inpatient facility examinations were in the North Caucasian FD (5.8%). Notably, in almost all FDs, the

implementation of necessary research in inpatient settings was higher than that in outpatient conditions.

The level of coverage in outpatient and inpatient studies was lower than the Russian level in 55.4% and 51.8% of the territories. Less than one-third of needy children received additional outpatient examinations in the Republics of Kalmykia, Tyva, Buryatia, and Khakassia and Arkhangelsk region; inpatient examinations were provided in Pskov, Leningrad, Irkutsk, and Kostroma regions.

Treatment was recommended for 4,536,195 (28.4%) children aged 0-17 years in outpatient and day hospital settings, for 364,985 (2.3%) in inpatient settings, and for 310,749 (1.9%) in therapeutic resort organizations. High levels of demand in all three types of treatment were noted in the North Caucasian FD (outpatient, 37.6%; inpatient, 17.8%; and therapeutic resort, 10.2%). In the Ural FD, the highest need for outpatient treatment was registered at 39.4% of cases.

In the constituent entities of the RF, children were recommended to receive outpatient treatment from 0.2% of cases in the Moscow region to 58.1% of cases in the Astrakhan region. In 55.4% of the territories, the frequency of the need for treatment in these conditions was higher than the average for Russia, while this value was more than 50% in the Arkhangelsk, Vologda, Murmansk, and Sverdlovsk regions; Chuvash Republic; and Stavropol Territory.

The analysis revealed that the need for inpatient treatment ranged from 0.1% in the Penza region to 33.1% in the Republic of Dagestan. In 12% of the RF constituent entities, it exceeded the Russian level, and it was more than 3% in Tver, Samara, and Bryansk regions and Republics of Mordovia, Ingushetia, and Chechen.

The resort treatment was the most recommended in 16.5% of cases in the Republic of Dagestan. Only in 21.7% of the constituent entities, this indicator was above the average for Russia. In a number of territories, such as in Kurgan, Pskov, Volgograd, Kaluga, Vladimir, Kaliningrad, and Tyumen regions, and the Republics of Tyva, Mari El, Buryatia, and Kalmykia, such recommendations were not provided at all.

CONCLUSIONS

In most of the constituent entities of the RF, a high level of coverage of preventive medical examinations for pediatric population was registered, especially among the adolescent age group. The regional features are revealed, which enable the identification of the most unfavorable territories. The presence of RF constituent entities with a coverage level exceeding

100% indicates defects in the organization of preventive medical examinations of the pediatric population or the lack of continuity between the medical institutions providing this type of services.

1. The share of a healthy pediatric population in the RF is more than one-third of all those examined. There are significant variations in the rates of healthy children and children having functional disorders and chronic diseases according to the constituent entities of the RF, which is determined by the quality and availability of medical care at the local level.
2. The general and primary morbidities of the pediatric population in majority (more than one-third) of the constituent entities of the RF have a level higher than that of the RF. Its prevalence is considered, and the structure is changed with age. The morbidity of children of all age groups is characterized by pronounced regional special aspects. The leading causes of morbidity in children are diseases of the respiratory, musculoskeletal, and nervous systems. In adolescents, they are the diseases of the musculoskeletal system, eyes and their appendages, and respiratory organs. A high morbidity phenomenon is unfavorable; however, this may indicate a fairly high detectability of chronic pathology in the territory.
3. The frequency of general and primary disabilities among the RF children has significant regional characteristics, and in almost one-third of the territories, its indicators exceeded the Russian level.

A small proportion of children who underwent preventive medical examinations needed additional consultations and studies on an outpatient basis and in a day hospital and even less in an inpatient 24-hour hospital settings; however, in more than half of the RF constituent entities, the coverage with these medical services was lower than the Russian level. Despite the high prevalence of chronic pathology among the Russian pediatric population, recommendations for treatment and rehabilitation during preventive medical examinations were given in an insufficient amount.

REFERENCES

1. Баранов А.А., Альбицкий В.Ю., Терлецкая Р.Н., Зелинская Д.И. Многоуровневая система оказания медицинской помощи детскому населению // Вопросы современной педиатрии. – 2014. – Т. 13. – № 2. – С. 5–10. [Baranov AA, Al'bickij VYu, Terleckaja RN, Zelinskaja DI. Multilevel system of delivery of health care to the children's population. *Voprosy sovremennoj pediatrii*. 2014;13(2):5-10. (In Russ.)]
2. Грибина Н.Н. Инновационные подходы к диспансеризации детей и подростков // Здоровье и образование в XXI веке. – 2014. – Т. 16. – № 1. – С. 9–15. [Gribina NN. Innovative approaches to medical examination of children and teenagers. *Zdorov'e i obrazovanie v XXI veke*. 2014;16(1):9-15. (In Russ.)]
3. Мурзабаева С.Ш. Государственная политика в сфере охраны здоровья детей: основной принцип – профилактика // Вестник Росздравнадзора. – 2012. – Т. 5. – С. 29–32. [Murzabaeva SSh. A state policy in the sphere of health protection of children: the basic principle – prevention. *Vestnik Roszdravnadzora*. 2012;5:29-32. (In Russ.)]
4. Щепин О.П. Роль диспансеризации в снижении заболеваемости населения // Проблемы социальной гигиены, здравоохранения и истории медицины. – 2015. – Т. 23. – № 1. – С. 3–7. [Shhepin OP. A medical examination role in decrease in incidence of the population. *Problemy social'noj gigieny, zdravoohranenija i istorii mediciny*. 2015;23(1):3-7. (In Russ.)]
5. Яковлева Т.В., Баранов А.А., Иванова А.А., Альбицкий В.Ю. Организационные принципы и технологии профилактики XXI века // Проблемы социальной гигиены, здравоохранения и истории медицины. – 2014. – Т. 6. – С. 3–9. [Jakovleva TV, Baranov AA, Ivanova AA, Al'bickij VYu. Organizational principles and technologies of prevention of the 21st century. *Problemy social'noj gigieny, zdravoohranenija i istorii mediciny*. 2014;6:3-9. (In Russ.)]

◆ Information about the authors

Alexander A. Baranov – MD, PhD, Dr Med Sci, Director, Member by Correspondence of Russian Academy of Sciences, administration. FGAIU "Scientific Center of Children's Health", Ministry of Healthcare of the Russian Federation. E-mail: baranov@nczd.ru.

◆ Информация об авторах

Александр Александрович Баранов – д-р мед. наук, директор, член-корреспондент РАН, Администрация. ФГАУ «Научный центр здоровья детей» Минздрава России». E-mail: baranov@nczd.ru.

◆ Information about the authors

Leila S. Namazova-Baranova – MD, PhD, Dr Med Sci, Member of Russian Academy of Sciences, Director of Scientific Research Institute of Pediatrics. FGAIU “Scientific Center of Children’s Health”, Ministry of Healthcare of the Russian Federation. E-mail: namazova@nczd.ru.

Rimma N. Terletskaia – MD, PhD, Dr Med Sci, Professor, Project Leader of laboratory of Social Pediatrics. FGAIU “Scientific Center of Children’s Health”, Ministry of Healthcare of the Russian Federation. E-mail: rterletskaia@nczd.ru.

Elena V. Antonova – MD, PhD, Dr Med Sci, Head, Dept. of Forecasting and Planning of Scientific Research. FGAIU “Scientific Center of Children’s Health”, Ministry of Healthcare of the Russian Federation. E-mail: antonova@nczd.ru.

Natalya V. Ustinova – MD, PhD, Dr Med Sci, Head, Laboratory of Social Pediatrics Federal state autonomous institution. FGAIU “Scientific Center of Children’s Health”, Ministry of Healthcare of the Russian Federation. E-mail: ustinova@nczd.ru.

Elena N. Baibarina – MD, PhD, Dr Med Sci, Professor. Director of The Department of Medical Care to Children and Maternity Obstetric Services. Ministry of Healthcare of the Russian Federation. E-mail: baibarina@mail.ru.

Olga V. Chumakova – MD, PhD, Dr Med Sci, Professor. Deputy Director of The Department of Medical Care to Children and Maternity Obstetric Services. Ministry of Healthcare of the Russian Federation. E-mail: chumakova@mail.ru.

◆ Информация об авторах

Лейла Сеймуровна Намазова-Баранова – д-р мед. наук, Академик РАН, директор НИИ педиатрии. ФГАУ «Научный центр здоровья детей» Минздрава России. E-mail: namazova@nczd.ru.

Римма Николаевна Терлецкая – д-р мед. наук, профессор, главный научный сотрудник лаборатории социальной педиатрии. ФГАУ «Научный центр здоровья детей» Минздрава России. E-mail: rterletskaia@nczd.ru.

Елена Вадимовна Антонова – д-р мед. наук, заведующая отделом прогнозирования и планирования научных исследований. ФГАУ «Научный центр здоровья детей» Минздрава России. E-mail: antonova@nczd.ru.

Наталья Вячеславовна Устинова – д-р мед. наук, заведующая лабораторией социальной педиатрии. ФГАУ «Научный центр здоровья детей» Минздрава России. E-mail: ustinova@nczd.ru.

Елена Николаевна Байбарина – д-р мед. наук, профессор, директор Департамента медицинской помощи детям и службы родовспоможения. Министерство здравоохранения Российской Федерации. E-mail: baibarina@mail.ru.

Ольга Васильевна Чумакова – д-р мед. наук, профессор, заместитель директора Департамента медицинской помощи детям и службы родовспоможения. Министерство здравоохранения Российской Федерации. E-mail: chumakova@mail.ru.