UDC 614.2
DOI: 10.56871/MHCO.2023.94.36.004

INCIDENCE OF ADOLESCENTS MORBIDITY IN THE NORTH-EASTERN CAUCASUS

© *Vadim K. Yuriev[1], Kazbek S. Mezhidov[2], Karina E. Moiseeva[1]*

[1] Saint Petersburg State Pediatric Medical University. Lithuania 2, Saint Petersburg, Russian Federation, 194100
[2] Republican Children's Clinical Hospital named after E.P. Glinka. I.I. Bisultanova 101, Grozny, Chechen Republic, Russian Federation, 364028

Contact information: Karina E. Moiseeva — PhD (Medicine), Professor of the Department of Public Health and Health. E-mail: karina-moiseeva@yandex.ru ORCID ID: 0000-0002-3476-5971

For citation: Yuriev VK, Mezhidov KS, Moiseeva KE. Incidence of adolescents morbidity in the North-Eastern Caucasus. Medicine and health care organization (St. Petersburg). 2023; 8(2):37–45. DOI: https://doi.org/10.56871/MHCO.2023.94.36.004

Received: 26.04.2023 **Revised: 02.06.2023** **Accepted: 29.06.2023**

ABSTRACT. Each region of Russia has its own natural-climatic and socio-economic features, unique peculiarities of the lifestyle of the population, certain social problems and social advantages, and therefore the study of the incidence of adolescents in concrete regions of the Russian Federation is of great medical and social importance. In order to assess the characteristics of the primary incidence of adolescents living in the region of the North-East Caucasus, official statistical reports and publications of the Federal State Statistics Service and the Ministry of Health of the Russian Federation for the Republic of Dagestan, the Republic of Ingushetia and the Chechen Republic for 2017–2021 were analyzed. It was established that the primary incidence of adolescents during the entire observation period in all three republics was below the national average, the lowest rates were noted in the Chechen Republic. In the structure of primary morbidity in the studied regions, as well as in the country as a whole, respiratory diseases prevailed, however, further distribution of disease classes by ranking places in each republic had its own characteristics. Lower, compared to the average for the Russian Federation, indicators of primary morbidity in 2021 were observed in the Republic of Dagestan for 7 classes of diseases, in the Republic of Ingushetia for 8 classes, in the Chechen Republic for 11 out of 13 identified classes. At the same time, the incidence of COVID-19 in adolescents was one of the lowest in the country. The dynamics of the primary incidence of adolescents in the Republic of Dagestan and the Chechen Republic corresponded to that in Russia as a whole — a stable level of the indicator in 2017–2018, a slight decrease in 2019, a sharp decrease in 2020 and a significant increase in 2021, while The Republic of Ingushetia did not show a decrease in the indicator in 2020, but the decrease was revealed a year later — in 2021. In the period from 2017 to 2021, the dynamics of primary morbidity rates for certain classes of diseases had multidirectional dynamics for most classes of diseases — against the background of an increase in the indicator in one region, a decrease in another and vice versa was noted.

KEY WORDS: teenagers; Northeast Caucasus; primary morbidity; incidence structure; dynamics.

ЗАБОЛЕВАЕМОСТЬ ПОДРОСТКОВ СЕВЕРО-ВОСТОЧНОГО КАВКАЗА

© *Вадим Кузьмич Юрьев[1], Казбек Султанович Межидов[2], Карина Евгеньевна Моисеева[1]*

[1] Санкт-Петербургский государственный педиатрический медицинский университет. 194100, Санкт-Петербург, ул. Литовская, д. 2
[2] Республиканская детская клиническая больница им. Е.П. Глинки. 364028, Российская Федерация, Чеченская Республика, г. Грозный, ул. имени И.И. Бисултанова, д. 101

Контактная информация: Карина Евгеньевна Моисеева — д.м.н., профессор кафедры общественного здоровья и здравоохранения. E-mail: karina-moiseeva@yandex.ru ORCID ID: 0000-0002-3476-5971

Для цитирования: Юрьев В.К., Межидов К.С., Моисеева К.Е. Заболеваемость подростков Северо-Восточного Кавказа // Медицина и организация здравоохранения. 2023. Т. 8. № 2. С. 37–45. DOI: https://doi.org/10.56871/МНСО.2023.94.36.004

Поступила: 26.04.2023 **Одобрена: 02.06.2023** **Принята к печати: 29.06.2023**

РЕЗЮМЕ. Каждый регион России имеет свои природно-климатические и социально-экономические особенности, особенности образа жизни населения, свои социальные проблемы и социальные преимущества, в связи с чем изучение особенностей заболеваемости подростков в отдельных субъектах РФ имеет важное медико-социальное значение. С целью оценки особенностей первичной заболеваемости подростков, проживающих в регионе Северо-Восточного Кавказа, были проанализированы официальные статистические отчеты и публикации Федеральной службы государственной статистики и Министерства здравоохранения РФ по Республике Дагестан, Республике Ингушетия и Чеченской Республике за 2017–2021 гг. Установлено, что первичная заболеваемость подростков в течение всего периода наблюдения во всех трех республиках была ниже средних показателей по стране, наиболее низкие показатели отмечались в Чеченской Республике. В структуре первичной заболеваемости в изучаемых регионах, как и в стране в целом, преобладали болезни органов дыхания, однако дальнейшее распределение классов болезней по ранговым местам в каждой республике имело свои особенности. Более низкие, по сравнению со средними по РФ, показатели первичной заболеваемости в 2021 г. наблюдались в Республике Дагестан по 7 классам заболеваний, в Республике Ингушетия — по 8 классам, в Чеченской Республике — по 11 из 13 выделенных классов. При этом заболеваемость подростков COVID-19 была одной из наиболее низких по стране. Динамика первичной заболеваемости подростков в Республике Дагестан и Чеченской Республике соответствовала таковой по России в целом: стабильный уровень показателя в 2017–2018 гг., небольшое снижение в 2019 г., резкое снижение в 2020 г. и значительный подъем в 2021 г., в то время как в Республике Ингушетия не наблюдалось снижения показателя в 2020 г., оно произошло на год позже — в 2021 г. В период с 2017 по 2021 г. показатели первичной заболеваемости отдельными классами болезней имели разнонаправленную динамику по большинству классов заболеваний: на фоне роста показателя в одном регионе отмечалось снижение в другом и наоборот.

КЛЮЧЕВЫЕ СЛОВА: подростки; Северо-Восточный Кавказ; первичная заболеваемость; структура заболеваемости; динамика.

INTRODUCTION

Each region of Russia has its own natural-climatic and socio-economic features, unique peculiarities of the lifestyle of the population, certain social problems and social advantages [2]. The region of the North-Eastern Caucasus, which includes the Chechen Republic, the Republic of Ingushetia and the Republic of Dagestan, is no exception. The identification of the North-East Caucasus as a special region is due to both its geographical location and the closeness of culture, type of behavior, mentality, a single religion (mainly Islam), similar demographic characteristics [9].

Adolescence is one of the most difficult periods in the life of every person and requires special attention from the state, since during this period the formation intellectual, labor, and reproductive potential of the country is completed, and cardinal physiological and psychological changes in the child occur [1]. At the same time, against the background of an incompletely formed attitude towards a conscious relation to one's own health, and often noted low medical activity, adolescents frequently develop chronic pathology, and there is a rapid transition from acute forms of diseases to recurrent and chronic forms [8]. In this regard, studying the features of adolescent incidence in individual regions of the country contributes to the adoption of management decisions necessary for a given area, the development of treatment, preventive and social measures aimed at improving the health of young people.

AIM

The aim of the study is to establish the characteristics of primary morbidity of adolescents living in the region of the North-Eastern Caucasus.

MATERIALS AND METHODS

In the course of this study, official statistical reports and publications of the Federal State Statistics Service were analyzed, as well as the collections "Morbidity of the Russian child population (15–17 years old) with a diagnosis established for the first time in life" (Part IX) of the federal state budgetary institution "Russian Research Institute of Health" of the Ministry of Health of the Russian Federation for 2017–2021 [3–7]. Statistical processing of results and data analysis were carried out using the computer program Microsoft Office Excel and a software package for statistical analysis developed by StatSoft, STATISTICA10.0.

RESULTS AND DISCUSSION

In 2021, primary morbidity rate among adolescents in the studied regions was: in the Republic of Dagestan — 1042,9, in the Republic of Ingushetia — 930,4 and in the Chechen Republic — 538,7 per 1000 children of the corresponding age. In the structure of primary morbidity, the first place in all three republics was occupied by diseases of the respiratory system, which accounted for 31,5% in the Republic of Dagestan, 46,7% in the Republic of Ingushetia, and 44,6% in the Chechen Republic (Table 1). In second place, but with a significantly lower share, in the Republic of Dagestan and the Republic of Ingushetia were injury, poisoning and certain other consequences of external causes, and in the Chechen Republic — diseases of the ear and mastoid process. The third place in the structure of primary incidence in the Republic of Ingushetia and the Chechen Republic was occupied by diseases of the eye and adnexa, and in the Republic of Dagestan — diseases of digestive system, while diseases of the eye and adnexa occupied fourth place.

Next in terms of share in the Republic of Dagestan were diseases of the genitourinary system, diseases of the skin and subcutaneous tissue, diseases of the ear and mastoid process, blood and blood-forming organs diseases and certain disorders involving the immune mechanism, endocrine, nutritional and metabolic diseases. The share of other classes of diseases in the morbidity structure accounted for less than 3%.

In the Republic of Ingushetia, fourth place belonged to diseases of the musculoskeletal system and connective tissue, fifth place went to diseases of the skin and subcutaneous tissue, followed by diseases of the digestive system, diseases of the ear and mastoid process, diseases of the genitourinary system, ninth-tenth place was shared by diseases of the nervous system and certain infectious and parasitic diseases.

In the structure of primary morbidity among adolescents of the Chechen Republic, fourth place was occupied by diseases of the genitourinary system, fifth place was taken by injury, poisoning and certain other consequences of external causes, followed by some infectious and parasitic diseases, diseases of the musculoskeletal system and connective tissue, blood and blood-forming organs diseases and certain disorders involving the immune mechanism, and diseases of the skin and subcutaneous tissue. Other classes of diseases had a share of less than 3%.

During the entire observation period (2017–2021), the level of primary morbidity among adolescents in all three republics of the North-Eastern Caucasus was below the national average (Fig. 1). At the same time, the lowest indicators of primary incidence were observed in the Chechen Republic, where the primary morbidity was 2,6–3,2 times lower than the Russian average.

The lower rates of primary incidence of adolescents in the Chechen Republic compared to the country as a whole in 2021 were largely due (Table 2) to diseases of the digestive system, the morbidity of which was 4,3 times lower, injury, poisoning and certain other consequences of external causes (–4,2 times), diseases of the skin and subcutaneous tissue (–3,6 times), respiratory diseases (–3,1 times), endocrine, nutritional and metabolic diseases (–2,5 times), diseases of the musculoskeletal system and connective tissue (–2,4 times) and diseases of the nervous system (–2,3 times).

The most significant difference in the levels of primary incidence among adolescents in the Russian Federation as a whole and the Republic

Table 1

The structure of primary morbidity among adolescents in the republics of the North-Eastern Caucasus in 2021 (in %)

Таблица 1

Структура первичной заболеваемости подростков в республиках Северо-Восточного Кавказа в 2021 г. (в %)

Класс болезней по МКБ-10 / Class of diseases according to ICD-10	**Республика Дагестан / The Republic of Dagestan**		**Республика Ингушетия / The Republic of Ingushetia**		**Чеченская Республика / Chechen Republic**	
	удельный вес / specific gravity	**ранговое место / rank place**	**удельный вес / specific gravity**	**ранговое место / rank place**	**удельный вес / specific gravity**	**ранговое место / rank place**
Болезни органов дыхания / Diseases of respiratory system	31,5	1	46,7	1	44,6	1
Травмы, отравления и некоторые другие последствия воздействия внешних причин / Injury, poisoning and certain other consequences of external causes	12,8	2	6,7	2	6,5	5
Болезни органов пищеварения / Diseases of digestive system	9,0	3	5,9	6	2,4	11
Болезни глаза и его придаточного аппарата / Diseases of the eye and adnexa	8,2	4	6,6	3	8,2	3
Болезни мочеполовой системы / Diseases of genitourinary system	7,4	5	4,7	8	7,4	4
Болезни кожи и подкожной клетчатки / Diseases of the skin and subcutaneous tissue	6,8	6	6,1	5	3,2	9
Болезни уха и сосцевидного отростка / Diseases of the ear and mastoid process	5,6	7	5,1	7	8,5	2
Болезни крови, кроветворных органов и отдельные нарушения, вовлекающие иммунный механизм / Blood and blood-forming organs diseases and certain disorders involving immune mechanism	4,0	8	0,7	12–13	3,5	8
Болезни эндокринной системы, расстройства питания и нарушения обмена веществ / Endocrine, nutritional and metabolic diseases	3,9	9	0,7	12–13	2,1	12
Болезни нервной системы / Diseases of the nervous system	2,5	10–11	3,5	9–10	2,9	10
Некоторые инфекционные и паразитарные болезни / Certain infectious and parasitic diseases	2,5	10–11	3,5	9–10	4,7	6
Болезни костно-мышечной системы и соединительной ткани / Diseases of the musculoskeletal system and connective tissue	2,4	12	6,5	4	3,9	7
COVID-19	1,2	13	1,7	11	0,4	13
Прочие / Other	2,2	–	1,6	–	1,7	–
Итого / Total	100,0	–	100,0	–	100,0	–

Table 2

Primary incidence of certain classes of diseases in adolescents (15–17 years old) of the Russian Federation as a whole and the republics of the North-Eastern Caucasus (per 1000 children aged 15–17) in 2021 and the difference in indicators (times)

Таблица 2

Первичная заболеваемость отдельными классами болезней подростков (15–17 лет) РФ в целом и республик Северо-Восточного Кавказа (на 1000 детей 15–17 лет) в 2021 г. и разница показателей (разы)

Класс болезней по МКБ-10 / Class of diseases according to ICD-10	Республика Дагестан (РД) / The Republic of Dagestan (RD)	Российская Федерация (РФ) / Russian Federation (RF)	РД/РФ / RD/RF	Республика Ингушетия (РИ) / The Republic of Ingushetia (RI)	Российская Федерация (РФ) / Russian Federation (RF)	РИ/РФ / RI/RF	Чеченская Республика (ЧР) / Chechen Republic (ChR)	Российская Федерация (РФ) / Russian Federation (RF)	ЧР/РФ / ChR/RF
Некоторые инфекционные и паразитарные болезни / Certain infectious and parasitic diseases	26,0	27,5	–1,1	32,3	27,5	+1,2	25,2	27,5	–1,1
Болезни крови, кроветворных органов и отдельные нарушения, вовлекающие иммунный механизм / Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	41,9	7,6	+5,5	6,6	7,6	–1,2	19,1	7,6	+2,5
Болезни эндокринной системы, расстройства питания и нарушения обмена веществ / Endocrine, nutritional and metabolic diseases	41,2	27,8	+1,5	6,8	27,8	–4,1	11,1	27,8	–2,5
Болезни нервной системы / Diseases of the nervous system	25,5	35,5	–1,4	32,0	35,5	–1,1	15,8	35,5	–2,3
Болезни глаза и его придаточного аппарата / Diseases of the eye and adnexa	85,0	54,3	+1,6	60,9	54,3	+1,1	44,1	54,3	–1,2
Болезни уха и сосцевидного отростка / Diseases of the ear and mastoid process	58,3	31,2	+1,9	47,4	31,2	+1,5	45,8	31,2	+1,5
Болезни органов дыхания / Diseases of the respiratory system	328,8	734,7	–2,2	434,3	734,7	–1,7	240,0	734,7	–3,1
Болезни органов пищеварения / Diseases of the digestive system	94,2	55,0	–1,7	54,8	55,0	–	12,8	55,0	–4,3
Болезни кожи и подкожной клетчатки / Diseases of the skin and subcutaneous tissue	70,3	61,2	+1,2	56,8	61,2	–1,1	16,9	61,2	–3,6
Болезни костно-мышечной системы и соединительной ткани / Diseases of the musculoskeletal system and connective tissue	25,3	49,1	–1,9	60,8	49,1	+1,2	20,9	49,1	–2,4
Болезни мочеполовой системы / Diseases of the genitourinary system	77,3	50,9	+1,5	44,0	50,9	–1,2	40,0	50,9	–1,3
Травмы, отравления и некоторые др. последствия воздействия внешних причин / Injury, poisoning and certain other consequences of external causes	133,2	147,1	–1,1	60,9	147,1	–2,4	34,8	147,1	–4,2
COVID-19	12,1	55,9	,4,6	15,8	55,9	–3,5	2,2	55,9	–25,4

Table 3

Dynamics of growth/decrease in the primary incidence of certain classes of diseases in adolescents (15–17 years old) in the republics of the North-Eastern Caucasus (per 1000 children aged 15–17) in the period from 2017 to 2021 (in %)

Таблица 3

Динамика роста/снижения первичной заболеваемости отдельными классами болезней подростков (15–17 лет) в республиках Северо-Восточного Кавказа (на 1000 детей 15–17 лет) в период с 2017 по 2021 гг. (в %)

Класс болезней по МКБ-10 / Class of diseases according to ICD-10	**Республика Дагестан / The Republic of Dagestan**		**Динамика в % / Dynamics in %**	**Республика Ингушетия / The Republic of Ingushetia**		**Динамика в % / Dynamics in %**	**Чеченская Республика / Chechen Republic**		**Динамика в % / Dynamics in %**
	2017	**2021**		**2017**	**2021**		**2017**	**2021**	
Некоторые инфекционные и паразитарные болезни / Certain infectious and parasitic diseases	23,4	26,0	+11,1	35,9	32,3	–10,0	31,0	25,2	–18,7
Болезни крови, кроветворных органов и отдельные нарушения, вовлекающие иммунный механизм / Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	57,3	41,9	–26,9	9,0	6,6	–26,7	43,9	19,1	–56,5
Болезни эндокринной системы, расстройства питания и нарушения обмена веществ / Endocrine, nutritional and metabolic diseases	53,3	41,2	–22,7	10,8	6,8	–37,0	8,3	11,1	+33,7
Болезни нервной системы / Diseases of the nervous system	43,0	25,5	–40,7	42,6	32,0	–24,9	13,6	15,8	+16,2
Болезни глаза и его придаточного аппарата / Diseases of the eye and adnexa	69,8	85,0	+21,8	69,8	60,9	–12,8	30,1	44,1	+46,5
Болезни уха и сосцевидного отростка / Diseases of the ear and mastoid process	57,0	58,3	+2,3	59,2	47,4	–19,9	46,2	45,8	–0,9
Болезни органов дыхания / Diseases of the digestive system	352,3	328,8	–6,7	427,0	434,3	+1,7	254,3	240,0	–5,6
Болезни органов пищеварения / Diseases of the digestive system	118,3	94,2	–20,4	75,8	54,8	–27,7	17,8	12,8	–28,1
Болезни кожи и подкожной клетчатки / Diseases of the skin and subcutaneous tissue	81,2	70,3	–13,4	69,5	56,8	–18,3	9,2	16,9	+83,7
Болезни костно-мышечной системы и соединительной ткани / Diseases of the musculoskeletal system and connective tissue	32,6	25,3	–22,4	74,9	60,8	–18,8	4,3	20,9	+386,1
Болезни мочеполовой системы / Diseases of the genitourinary system	82,8	77,3	–6,4	61,8	44,0	–28,8	18,5	40,0	+116,2
Травмы, отравления и некоторые др. последствия воздействия внешних причин / Injury, poisoning and certain other consequences of external causes	153,4	133,2	–13,2	69,6	60,9	–12,5	30,1	34,8	+15,6

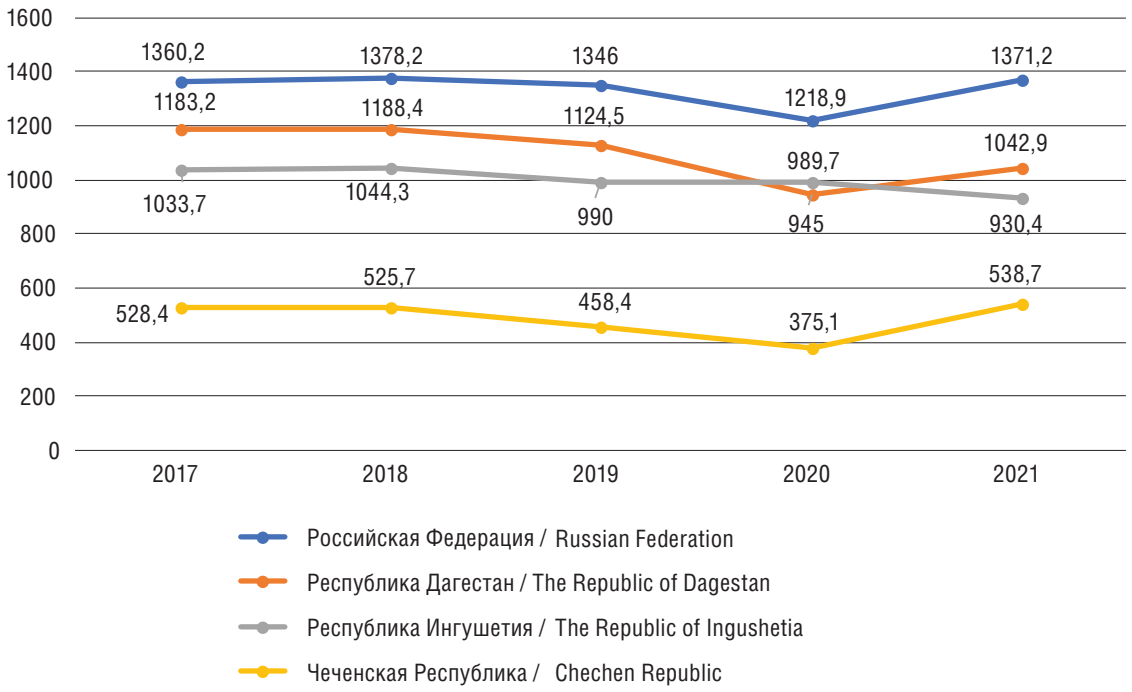

Fig.1. Dynamics of primary morbidity among adolescents in the Russian Federation as a whole and the republics of the North-Eastern Caucasus (per 1000 children aged 15–17)

Рис. 1. Динамика первичной заболеваемости подростков Российской Федерации в целом и республик Северо-Восточного Кавказа (на 1000 детей 15–17 лет)

of Dagestan was observed by classes: diseases of the respiratory system (–2,2 times), diseases of the musculoskeletal system and connective tissue (–1,9 times), diseases of the digestive system (–1,7 times) and diseases of the nervous system (–1,4 times).

In the Republic of Ingushetia, much lower indicators of primary morbidity in adolescents compared to the national average were recorded in the classes of endocrine, nutritional and metabolic diseases (–4,1 times), injury, poisoning and certain other consequences of external causes (–2,4 times), respiratory diseases (–1,7 times), diseases of the genitourinary system (–1,2 times).

At the same time, attention is drawn to the significantly higher primary incidence in adolescents of diseases of the blood and haemopoietic organs and certain disorders involving the immune mechanism in the Republic of Dagestan (+5,5 times) and the Chechen Republic (+2,5 times). In addition, it should be noted that all three republics of the North-Eastern Caucasus successfully coped with COVID-19 morbidity in adolescents in 2021, which made it possible to achieve one of the lowest rates in the country.

An analysis of the dynamics of primary incidence of adolescents showed (Fig. 1) that in the Republic of Dagestan and the Chechen Republic the dynamics of the indicator corresponded to that in Russia as a whole — a stable level of the indicator in 2017–2018, a slight decrease in 2019, a sharp decrease in 2020 and a significant increase in 2021 to the level of 2017. Unlike the Republic of Dagestan, the Chechen Republic and the country as a whole, the Republic of Ingushetia did not show a decrease in the indicator in 2020, but the decrease was revealed a year later — in 2021.

There is no doubt that the sharp decrease in morbidity in 2020 was due to the COVID-19 pandemic outbreak, which led to the introduction of a number of quarantine restrictions, a reduction in social contacts and the risk of the spread of infectious diseases, a decline in the volume of planned medical care, and a decrease in visits to medical organizations. The increase in incidence in 2021, obviously, was of a compensatory nature, when the first reaction to the emerging pandemic subsided somewhat and a number of measures taken allowed primary health and social care for children to be made

more accessible, and for the population to increase their access to medical organizations.

Comparative analysis of the dynamics of primary morbidity rates for certain classes of diseases in the period from 2017 to 2021 showed multidirectional dynamics for most classes of diseases (Table 3).

Thus, if over the past 5 years the primary incidence of endocrine, nutritional and metabolic diseases, diseases of the nervous system, diseases of the skin and subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, diseases of the genitourinary system, injury, poisoning and certain other consequences of external causes in the Republic of Dagestan and the Republic of Ingushetia decreased, while in the Chechen Republic, on the contrary, it increased. The morbidity of certain infectious and parasitic diseases, diseases of the ear and mastoid process in the Republic of Ingushetia and the Chechen Republic decreased during this period, while in the Republic of Dagestan it increased. The incidence of diseases of the eye and adnexa increased in the Chechen Republic and the Republic of Dagestan, and decreased in the Republic of Ingushetia. The incidence of diseases of the respiratory system decreased in the Republic of Dagestan and the Chechen Republic, but increased in the Republic of Ingushetia. At the same time, in all three republics there was a decrease in the primary morbidity of blood and haemopoietic organs diseases and certain disorders involving the immune mechanism, and diseases of the digestive system.

The most significant changes in the period 2017–2021 occurred in the Chechen Republic: an increase in the primary incidence of adolescents with diseases of the musculoskeletal system and connective tissue by 386.1%, diseases of the genitourinary system — by 116.2%, diseases of the skin and subcutaneous tissue — by 83.7%, diseases of the eye and adnexa — by 46.5%, endocrine, nutritional and metabolic diseases — by 33.7% and a reduction in the morbidity of diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism, by 56.5%. In addition, the primary incidence of diseases of the nervous system in the Republic of Dagestan and endocrine, nutritional and metabolic diseases in the Republic of Ingushetia (37.0%) decreased very significantly (by 40.7%).

CONCLUSION

1. The level of primary incidence among adolescents living in the republics of the North-Eastern Caucasus during 2017–2021 was below the national average, the lowest rates were noted in the Chechen Republic.

2. Each republic has its own characteristics of the morbidity structure, lower, compared to the average for the Russian Federation, indicators of primary incidence for most classes of diseases.

3. The republics of the North-Eastern Caucasus successfully coped with COVID-19 morbidity in adolescents and achieved some of the lowest rates in the country.

4. In 2017–2018 in all three republics there was a stable level of primary incidence of adolescents; in 2019 there was a slight decrease in the rate, and then in the Republic of Dagestan and the Chechen Republic there was a sharp decrease in 2020 and a significant increase in 2021, which corresponded to the dynamics in the country as a whole. At the same time, in the Republic of Ingushetia there was no decrease in the indicator in 2020; it occurred a year later — in 2021.

5. During the period under study, the dynamics of primary morbidity rates for certain classes of diseases had multidirectional dynamics for most classes of diseases — against the background of an increase in the indicator in one region, a decrease in another and vice versa was noted.

ADDITIONAL INFORMATION

Author contribution. Thereby, all authors made a substantial contribution to the conception of the study, acquisition, analysis, interpretation of data for the work, drafting and revising the article, final approval of the version to be published and agree to be accountable for all aspects of the study.

Competing interests. The authors declare that they have no competing interests.

Funding source. This study was not supported by any external sources of funding.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ

Вклад авторов. Все авторы внесли существенный вклад в разработку концепции, проведение исследования и подготовку ста-

тьи, прочли и одобрили финальную версию перед публикацией.

Конфликт интересов. Авторы декларируют отсутствие явных и потенциальных конфликтов интересов, связанных с публикацией настоящей статьи.

Источник финансирования. Авторы заявляют об отсутствии внешнего финансирования при проведении исследования.

REFERENCES

1. Baranov A.A., Al'bitskiy V.Yu., Namazova-Baranova L.S., Terletskaya R.N. Sostoyaniye zdorov'ya detey v sovremennoy Rossii. [The state of health of children in modern Russia]. Moskva: Pediatr Publ.; 2020. (in Russian).
2. Ivanov D.O., Moiseyeva K.Ye., Yur'yev V.K. i dr. Rezul'taty issledovaniya nekotorykh pokazateley kachestva i dostupnosti meditsinskoy pomoshchi detyam na regional'nom urovne. [The results of the study of some indicators of the quality and accessibility of medical care for children at the regional level]. Meditsina i organizatsiya zdravookhraneniya. 2021; 6(4): 4–23. (in Russian).
3. Zabolevayemost' detskogo naseleniya Rossii (15–17 let) v 2017 godu s diagnozom, ustanovlennym vpervyye v zhizni. [The incidence of the child population of Russia (15–17 years) in 2017 with a diagnosis established for the first time in life]. Moskva: TSNIIO i IZ Publ.; 2018. (in Russian).
4. Zabolevayemost' detskogo naseleniya Rossii (15–17 let) v 2018 godu s diagnozom, ustanovlennym vpervyye v zhizni. [The incidence of the child population of Russia (15–17 years) in 2018 with a diagnosis established for the first time in life]. Moskva: TSNIIO i IZ Publ.; 2019. (in Russian).
5. Zabolevayemost' detskogo naseleniya Rossii (15–17 let) v 2019 godu s diagnozom, ustanovlennym vpervyye v zhizni. [The incidence of the child population of Russia (15–17 years) in 2019 with a diagnosis established for the first time in life]. Moskva: TSNIIO i IZ Publ.; 2020. (in Russian).
6. Zabolevayemost' detskogo naseleniya Rossii (15–17 let) v 2020 godu s diagnozom, ustanovlennym vpervyye v zhizni [The incidence of the child population of Russia (15–17 years) in 2020 with a diagnosis established for the first time in life]. Moskva: TSNIIO i IZ Publ.; 2021. (in Russian).
7. Zabolevayemost' detskogo naseleniya Rossii (15–17 let) v 2021 godu s diagnozom, ustanovlennym vpervyye v zhizni [The incidence of the child population of Russia (15–17 years) in 2021 with a diagnosis established for the first time in life]. Moskva: TSNIIO i IZ Publ.; 2022. (in Russian).
8. Orel V.I., Kim A.V., Sereda V.M. i dr. Organizatsiya mediko-sotsial'noy raboty sredi detskogo naseleniya. [The organization of medical-social work among children]. Pediatrician. 2017; 8(6): 24–9. DOI: 10.17816/PED8624-29. (in Russian).
9. Yur'yev V.K., Suleymanov E.A., Mezhidov K.S., Moiseyeva K.Ye. Osobennosti pervichnoy zabolevayemosti detskogo naseleniya Chechenskoy Respubliki. [Peculiarities of primary morbidity in the children's population of the Chechen Republic]. Meditsina i organizatsiya zdravookhraneniya. 2022; 7(3): 20–7. DOI: 10.56871/2725.2022.27.13.003. (in Russian).

ЛИТЕРАТУРА

1. Баранов А.А., Альбицкий В.Ю., Намазова-Баранова Л.С., Терлецкая Р.Н. Состояние здоровья детей в современной России. М.: ПедиатрЪ; 2020.
2. Иванов Д.О., Моисеева К.Е., Юрьев В.К. и др. Результаты исследования некоторых показателей качества и доступности медицинской помощи детям на региональном уровне. Медицина и организация здравоохранения. 2021; 6(4): 4–23.
3. Заболеваемость детского населения России (15–17 лет) в 2017 году с диагнозом, установленным впервые в жизни. М.: ЦНИИО и ИЗ; 2018.
4. Заболеваемость детского населения России (15–17 лет) 2018 году с диагнозом, установленным впервые в жизни. М.: ЦНИИО и ИЗ; 2019.
5. Заболеваемость детского населения России (15–17 лет) 2019 году с диагнозом, установленным впервые в жизни. М.: ЦНИИО и ИЗ; 2020.
6. Заболеваемость детского населения России (15–17 лет) 2020 году с диагнозом, установленным впервые в жизни. М.: ЦНИИО и ИЗ; 2021.
7. Заболеваемость детского населения России (15–17 лет) 2021 году с диагнозом, установленным впервые в жизни. М.: ЦНИИО и ИЗ; 2022.
8. Орел В.И., Ким А.В., Середа В.М. и др. Организация медико-социальной работы среди детского населения. Педиатр. 2018; 9(1): 54–60. DOI: 10.17816/PED9154-60.
9. Юрьев В.К., Сулейманов Э.А., Межидов К.С., Моисеева К.Е. Особенности первичной заболеваемости детского населения Чеченской Республики. Медицина и организация здравоохранения. 2022; 7(3): 20–7.