

UDC 616.053.2+614.2+616-08-039.71+371.711+578.834.1+613.95+316.61
DOI: 10.56871/MHCO.2023.47.38.003

APPROACHES TO OPTIMIZING THE WORK OF A CHILDREN'S POLYCLINIC IN THE CONTEXT OF PANDEMIC

© Marina N. Salova¹, Evgenia V. Shemanaeva¹, Lyudmila A. Zhdanova², Irina E. Boboshko²

¹ Ivanovo Clinical Hospital named after Kuvaev. Ermaka str. 5, Ivanovo, Russian Federation, 153025

² Ivanovo State Medical Academy. Sheremetievo Avenue 8, Ivanovo, Russian Federation, 153012

Contact information: Marina N. Salova — Head of the Department of medical rehabilitation of the children's polyclinic.

E-mail: salova_m@mail.ru ORCID ID: 0000-0003-4171-4715 SPIN: 8767-9889

For citation: Salova MN, Shemanaeva EV, Zhdanova LA, Boboshko IE. Approaches to optimizing the work of a children's polyclinic in the context of pandemic. Medicine and health care organization (St. Petersburg). 2023;8(3):26-34. DOI: <https://doi.org/10.56871/MHCO.2023.47.38.003>

Received: 27.04.2023

Revised: 19.05.2023

Accepted: 04.09.2023

ABSTRACT. The main directions of optimizing the work of a children's polyclinic in a pandemic are presented, which consist in maintaining the whole amount of preventive of work while excluding the crossover of patients' tides and minimizing the number of visits to a healthcare institution. The prerequisites and the goal of innovations are revealed (carrying out preventive examinations at certain age periods, before referring a child to a psychological, medical and pedagogical commission, medical and social expertise), their effectiveness is shown. A variant of using electronic technologies to improve the compliance of the district pediatrician with the patients' families, early detection of mental health disorders in children aged 2 years is described. Approaches to the active detection of post-covoid health disorders in children and providing them with rehabilitation assistance are proposed.

KEY WORDS: children's polyclinic; children's health; new coronavirus infection.

ПОДХОДЫ К ОПТИМИЗАЦИИ РАБОТЫ ДЕТСКОЙ ПОЛИКЛИНИКИ В УСЛОВИЯХ ПАНДЕМИИ

© Марина Николаевна Салова¹, Евгения Владимировна Шеманаева¹, Людмила Алексеевна Жданова², Ирина Евгеньевна Бобошко²

¹ Ивановская клиническая больница имени Куваевых. 153025, Российская Федерация, г. Иваново, ул. Ермака, 5

² Ивановская государственная медицинская академия. 153012, Российская Федерация, г. Иваново, Шереметьевский пр., 8

Контактная информация: Марина Николаевна Салова — заведующая отделением медицинской реабилитации детской поликлиники. E-mail: salova_m@mail.ru ORCID ID: 0000-0003-4171-4715 SPIN: 8767-9889

Для цитирования: Салова М.Н., Шеманаева Е.В., Жданова Л.А., Бобошко И.Е. Подходы к оптимизации работы детской поликлиники в условиях пандемии // Медицина и организация здравоохранения. 2023. Т. 8. № 3. С. 26–34. DOI: <https://doi.org/10.56871/MHCO.2023.47.38.003>

Поступила: 27.04.2023

Одобрена: 19.05.2023

Принята к печати: 04.09.2023

РЕЗЮМЕ. Представлены основные направления оптимизации работы детской поликлиники в условиях пандемии, заключающиеся в сохранении полного объема профилактического направления работы при исключении пересечения потоков пациентов и минимизации визитов в учреждение здравоохранения. Раскрыты предпосылки и суть нововведений (проведение профилактических осмотров в определенные возрастные периоды, перед направлением ребенка

на психолого-медико-педагогическую комиссию, медико-социальную экспертизу), показана их эффективность. Описан вариант использования электронных технологий для повышения комплаенса участкового педиатра с семьями пациентов, раннего выявления нарушений психического здоровья детей в возрасте двух лет. Предложены подходы к активному выявлению постковидных нарушений здоровья у детей и оказанию им реабилитационной помощи.

КЛЮЧЕВЫЕ СЛОВА: детская поликлиника; здоровье детей; новая коронавирусная инфекция.

INTRODUCTION

In 2020–2021, new forms of children's outpatient clinic (polyclinic) work were urgently needed due to the emerged pandemic of new coronavirus infection (NCVI). Owing to the long period of restrictions, the population postponed visiting institutions, including medical ones. The forced temporary reduction in the volume of preventive care changed a timeframe for preventive examinations of minors. At the same time, it was important to retain such examinations for children with serious health problems. In addition, parents of toddlers who were unable to visit their local pediatrician in person needed regular advice on the care, feeding, development and upbringing. Another problem was monitoring the health of children from social risk groups (families with disabled children, families and minors at risk, in difficult life situations, orphans and children under guardianship, pregnant women and those who gave birth before the age of 18).

Thus, in the current situation of pandemic and self-isolation, it was necessary to preserve the preventive measures for children's polyclinic as much as possible, while minimizing the number of visits and minimizing the time spent in a medical organization.

AIM

To substantiate approaches in order to optimize the work of children's polyclinics during the pandemic, as well as to provide comprehensive rehabilitation assistance to children who have undergone the new coronavirus infection (NCVI).

MATERIALS AND METHODS

The research included the analysis of medical records (f. 112/u) of 987 children aged two years to identify signs of mental developmen-

tal disorders, 868 children 0–17 years old who had undergone NCVI in 2020–2022, including 128 children who received rehabilitation treatment in the medical rehabilitation department for post-COVID health disorders. All children were patients of children's polyclinic No. 8 the Regional budgetary healthcare institution Ivanovskaya clinical hospital named after Kuvaevs in Ivanovo (RBHI ICH named after Kuvaevs). Parents were interviewed to assess their satisfaction with preventive medical care in the children's polyclinic. The survey was conducted anonymously and on a voluntary basis, after obtaining informed consent on a special form sent to the parents' e-mail address. The indicators characterizing the criteria for assessing the quality of care were the openness and accessibility of information about the medical organization, the comfort of providing medical services and its accessibility, the waiting time of medical services; friendliness, politeness and competence of the employees, and satisfaction with the services provided.

M-CHAT-R/F (Modified Checklist for Autism in Toddlers) — modified autism screening test for young children as a screening tool to assess the risk of autism spectrum disorder had a list of 20 control questions.

The duration of patients' stay in the outpatient clinic was assessed by means of timekeeping.

In addition, the statistical reporting documentation with the results of medical examinations of minors was evaluated.

RESULTS AND DISCUSSION

At the beginning of lockdown (from the beginning of April 2020), NCVI in children occurred in rare cases only, nevertheless it was decided to make changes in the organization of the children's polyclinic (Fig. 1).

At the beginning of the pandemic in 2020, the main task of the children's polyclinic was to prevent the intersection of patient flows

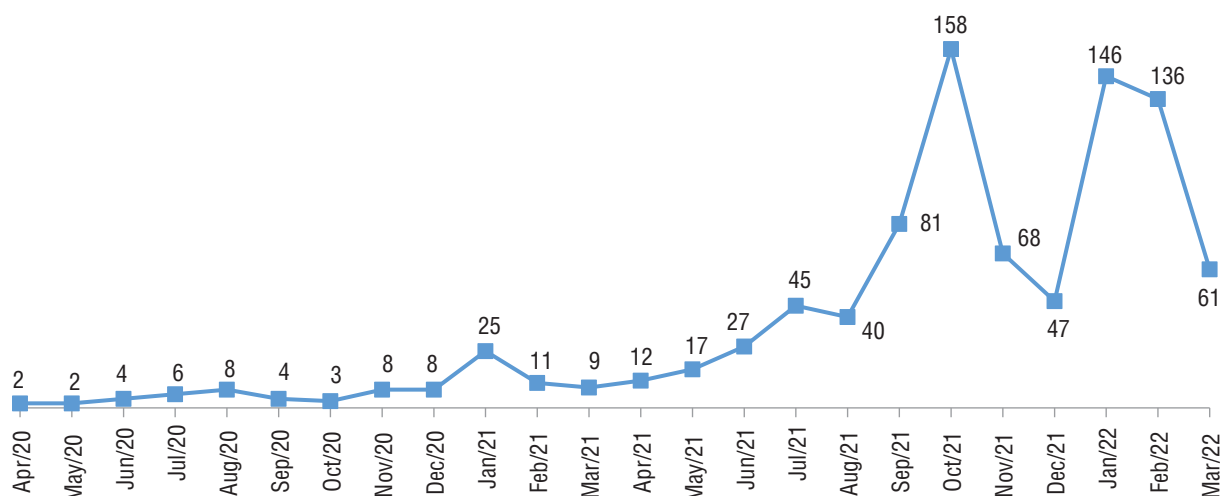


Fig. 1. Seasonal incidence of NCVI in children's polyclinic № 8 in Ivanovo for 2020–2022 (abs.)

Рис. 1. Сезонная регистрация случаев НКВИ в детской поликлинике № 8 г. Иваново за 2020–2022 гг. (абс.)

coming for preventive and other purposes, as well as to preserve the quality of care provided while minimizing the number of visits to the institution. In the fall-winter period of 2021 and early 2022, due to outbreaks of NCVI, the medical staff was facing the tasks of timely detection of post-covid health disorders in children and justification of approaches in order to provide such patients with rehabilitation care. To solve these tasks, new forms of work have been introduced in the children's polyclinic No. 8 of the Regional budgetary healthcare institution Ivanovskaya clinical hospital named after Kuvaevs since the beginning of 2021.

1. Improvement of interaction between the children's polyclinic and parents through electronic technologies

There has always been the problem of receiving quality preventive information and the opportunity to pose a question to a pediatrician without visiting a polyclinic. However, it has become especially acute for parents in conditions of the pandemic.

Background to the innovation:

- lack of reliable medical information on care, nutrition, education of children of a certain age category in the media;
- difficulty of perception and memorization of preventive information that parents received during a medical appointment;

- lack of feedback between a pediatrician and a parent concerning preventive care.

The essence of the innovation was contained in electronic distribution of medical information on care, nutrition, vaccination, education, which also covered current socially important issues (changes in the mode of operation of the polyclinic, prevention of coronavirus infection among children and adults, answers to parents' questions)

A special form of patients' consent to the processing of personal data was developed. Parents' e-mail addresses were collected during the primary nursing by a district nurse, and then a nurse of the healthy child's cabinet (a service organized as part of a children's clinic to carry out preventive work with healthy infants and toddlers) created a database of e-mail addresses of infants' legal representatives which was attached to a service area of the children's polyclinic. The database was divided into subgroups by pediatric areas and by age periods. An informational and methodological base was created for parents (colorful booklets, brochures, leaflets) using modern scientific and practical clinical recommendations with a high level of evidence. Weekly preventive information, taking into account the age grouping of children, was sent to parents. Feedback with patients was organized through the polyclinic's e-mail. Frequently asked questions are monitored daily on the hospital's website and in the children's out-

patient clinic's mail. Templates were created on the basis of these questions.

Effectiveness:

- Increased parental satisfaction with the provision of preventive care in the children's polyclinic (in questionnaire-survey of parents in 2020 the subjective assessment amounted to 45%, in 2021 — 67%).

2. Optimization of complex medical check-ups of unorganized children

Problems in the conduct of preventive medical examinations of minors arose in the “pre-COVID” time, their organization had considerable difficulties associated with both the appointment to doctors of narrow specialties, and the need for multiple visits to the polyclinic, as well as the presence of healthy and convalescent children in the common corridor while waiting for a check-up.

Background to the innovation:

- intersection of patient flows, who came with preventive and other purposes;
- the need for several visits to the polyclinic to undergo preventive examinations with the participation of several doctors (in accordance with the regulatory framework) [3];
- long waiting time for appointments with doctors of narrow specialties.

The essence of the innovation is to conduct a complex check-up of a child at a strictly defined time by a team of specialists and a pediatrician, who are in adjacent rooms. A route list has been developed for each type of examination, according to the age of a child, indicating the date, time of a check-up and a doctor's room number. Lists of children to be examined are compiled by the head of the consulting and diagnostic department.

The district nurse is responsible for notifying the parents of the date, time and place of a preventive check-up. The team of doctors is located in one wing of the building of the children's polyclinic in neighboring rooms, which allows parents to easily find the right room (in order) and pass the check-up in a short time.

Results:

- reduction of time required to undergo a complex medical check-up for a child: in 2020, 4 to 12 visits to the polyclinic were required to undergo a medical check-up, with a total time of more than 150 minutes

spent in the polyclinic; in 2021, 2 visits were required for the same purpose, with a total time of 60–90 minutes;

- prevention of crossing of patient flows with different purposes;
- increasing the logicity of a patient's route with the fixed time and date of visiting a pediatrician and (or specialized physicians);
- maintaining the uniformity of the load on specialized physicians and reducing the time of passing through all stages of a check-up by one patient;
- the district nurse is additionally responsible for notifying the parents of the date, time and place of preventive check-ups;
- templates for preventive check-ups have been developed in accordance with the scope of examination, gender and age of a child;
- increasing the coverage rate of medical check-ups for minors (70% in 2020 and 93% in 2021);
- the absence of the need to make an appointment with physicians of narrow specialties independently increased satisfaction with comfort, moreover, considerable time savings of parents significantly increased satisfaction of population with the organizational of medical preventive check-ups (in 2020 — 23%, in 2021 — 75%).

3. Optimization of a complex check-up of a child by referral to a psychological, medical and pedagogical commission or a medical and social expert assessment

Inspections of children with developmental disorders and serious illnesses referred to a psychological, medical and pedagogical commission (PMPC) and a medical and social expert assessment (MSEA) were organized in a similar manner.

Background to the innovation: a complex check-up of a child is conducted before referring him/her to the PMPC or preparing documents for the MSEA. Parents are provided with route sheets with indicated time of a check-up and specialist cabinets. A district pediatrician prepares an extract from a child's outpatient card for the PMPC in advance. To facilitate interaction with the PMPC, a unified “Form of medical-specialists' opinion” has been developed, which repla-

ces 4 certificates issued to parents based on the results of the check-up.

Effectiveness:

- reducing the time to complete a complex medical check-up of a child: in 2020, 5 to 10 visits were required, in 2021 — 2 visits;
- exclusion of intersection of patient flows different purposes;
- increasing patient satisfaction with the organization of these types of check-ups by saving parents' time (34% in 2020, 83% in 2021);
- strengthening of interdepartmental interaction with the PMPC (positive feedback from the heads of the regional and territorial PMPC).

4. Organization of appointments for complex medical check-ups through the website of the children's polyclinic

The need to minimize the number of patient visits to the polyclinic has led to wide inclusion of using electronic technologies in the process of organizing complex check-ups.

Background to the innovation:

- “unnecessary” visits by parents to the district pediatrician to report the need to undergo a complex check-up for any purpose (e.g., before PMPC, before MSEA, at certain age periods);
- population migration and a large number of newly arrived children who have not undergone a scheduled preventive checkup.

The essence of the innovation: an “online services” section was created on the website of the children's polyclinic, which allows parents to order a complex preventive checkup for their child without visiting the children's polyclinic. The application for a complex medical check-up comes to the post office of the children's polyclinic, then it is immediately processed by the senior nurse of the consulting and diagnostic department, and the dates of previous check-ups are analyzed in the child's development history.

A route sheet is formed, including the date and time of the complex check-up. Then the child with his/her legal representative is invited to the polyclinic by phone, the route sheet is also sent to the parents' e-mail.

Effectiveness:

- reduction of visits to the district pediatrician to report the need to undergo a complex check-up: in 2020 — up to 10 visits per shift, in 2021 — no more than 2;

- exclusion of intersection of patient flows different purposes;
- increase in public satisfaction due to the absence of need to visit the polyclinic in order to make an appointment for a check-up.

5. Optimization of the work of the medical and social assistance office

During the pandemic, special difficulties arose in working with patients whose care requires the participation of specialists from the medical and social assistance office.

Background to the innovation:

- difficulties of primary identification of social risk families in conditions of forced self-isolation of the population;
- organization and control over the provision of medical care to children from social risk families in conditions of limited preventive care in the polyclinic;
- the need to regularly transfer information on this category of patients to the polyclinic at the interdepartmental level.

The essence of the innovation the information sheet on dysfunctional families, which is transmitted by the district service to the medical and social assistance office, has been updated and improved: it contains information on the composition of a family, its social status, and specific problems identified during family nursing (possible options are contained in the information sheet). The medical and social service records of the children's polyclinic are kept in electronic form: identification and records of work with families at risk, children under guardianship and custody, results of work with children in difficult life situations, a list of disabled children, a list of children at risk, and others.

Effectiveness:

- increasing the level of coverage of medical check-ups of children from families at social risk and in difficult life situation, trustees, orphans, children with disabilities: in 2020 — 72%, in 2021 — 95%;
- timely interdepartmental transfer of information on dysfunctional families.

6. Optimizing the process of early identification of mental health disorders in children

Diagnosing neuropsychiatric development and identifying mental health disorders are par-

ticularly difficult during complex assessments of children's health. Most often the assessment is conducted formally, due to the lack of time and methodological basis. The participation of a psychiatrist in the diagnosis of developmental disorders is usually accompanied by an inadequate attitude of parents.

Background to the innovation:

- high frequency of deviations in mental development in children, increasing autism spectrum disorders [1, 2, 5, 6];
- parents' refusal to conduct screening to identify the child's risk group for the emergence or presence of mental developmental disorders in children from 18 months of age (according to the current regulatory framework) [3, 4];
- increasing general anxiety of the population in the context of a pandemic and increasing negative attitudes towards medical procedures.

That is why the traditional use of the recommended M-CHAT test for the timely detection of mental developmental disorders in children from one and a half years of age also required some optimization.

The essence of the innovation: before a scheduled check-up of a child at the age of 2, parents receive information on the importance of early detection of mental disorders, as well as the M-CHAT test, which is offered to be filled out by a mother in quiet home conditions and brought on a day of the check-up.

A district pediatrician analyzes M-CHAT results during a preventive checkup and, if necessary, provides a referral to a psychiatrist and/or neurologist (if parents refuse to see a psychiatrist).

Effectiveness:

- increased compliance with parents regarding the need for the questionnaire: in 2020, 24% of parents refuse to complete the test, in 2021 — 2%;
- increased detection of mental health deviations in children aged 2 years: in 2020 — in 3% of children, in 2021 — in 15% of children.

Children with mental developmental disorders can receive complex assistance in our polyclinic in the medical rehabilitation department. The work of the department consists of complex correctional medical, psychological and pedagogical rehabilitation, which is carried out both

by physicians and teachers. Most patients of the department are children with delayed neuropsychological development. However, recently we had to focus the work of the department on rendering assistance to children who have endured a new coronavirus infection.

7. Providing rehabilitation care for children who have survived the new coronavirus infection at the pediatric outpatient clinic

April 2020 through February 2022, 868 children were diagnosed with NCVI. After suffering COVID-19, 325 children (37.44%) visited the outpatient clinic with various health complaints, and almost half of them were adolescents (Table 1).

The main clinical syndromes of post-COVID health disorders in children of all ages were somatovegetative and cerebroasthenic syndromes, emotional and behavioral disorders, dysarthritic syndromes in preschoolers and cognitive and cephalgic syndromes in schoolchildren (Table 2).

It is important to note that all children with post-COVID disorders had an aggravated perinatal background.

To actively identify the post-COVID syndrome in patients, a screening questionnaire was developed for children of early, preschool, and school age (from 15 y.o. it is filled in by a patient himself); it is based on the main clinical manifestations among children of these age periods. Online parental questionnaires revealed post-COVID health disorders in 73% of children.

Background to the innovation:

- high incidence of health impairment in children after COVID-19;
- the need to provide rehabilitation assistance to pediatric population in outpatient clinics.

The essence of the innovation: The essence of the innovation: sending a screening questionnaire to the e-mail of parents whose children have endured COVID-19 to identify post-COVID health disorders. Children with clinical signs of post-COVID syndrome are invited to the medical rehabilitation department for rehabilitation treatment. An electronic handout on organization of child's life activities is sent to a family. The handout explains the need to follow the daily regime, timely sleep, nutrition, gradual resumption of physical activity and protective

Table 1

The frequency of health disorders after undergoing NCVI in children of different age groups

Таблица 1

Частота нарушений здоровья после перенесенной НКВИ у детей разных возрастных групп

Возрастные периоды / Age periods	Факт. / Fact.	%	Доверительный интервал / Confidence interval
Дети 0–3 лет (раннего возраста) / Children 0–3 years old (young age)	48	14,77	40–56
Дети 4–7 лет (дошкольного возраста) / Children 4–7 years old (preschool age)	60	18,46	51–69
Дети 8–11 лет (младшего школьного возраста) / Children 8–11 years old (primary school age)	65	20,0	56–74
Дети 12–17 лет (среднего и старшего школьного возраста) / Children 12–17 years old (middle and high school age)	152	46,77	140–164

Table 2

The main clinical manifestations of bridge syndrome in children of different age groups (%)

Таблица 2

Основные клинические проявления постковидного синдрома у детей разных возрастных групп (%)

Ведущий клинический синдром / Leading clinical syndrome	Дети (возраст, лет) / Children (years old)			
	0–3 (n=48)	4–7 (n=60)	8–11 (n=65)	12–17 (n=152)
Соматовегетативный / Somatovegetative	70,83	26,67	15,38	7,24
Эмоционально-поведенческий / Emotional and behavioral	29,17	50,0	18,46	21,05
Цереб्रोастенический / Cerebrastenic	–	–	32,31	32,24
Дизартрический / Dysarthric	–	23,33	–	–
Когнитивный / Cognitive	–	–	23,77	14,47
Цефалгический / Cephalgic	–	–	10,77	25,0

climate in a family (praise more often to improve serotonin mediation). The polyclinic's website has a presentation with "healthy life hacks".

The medical rehabilitation department conducts:

- 1) physiotherapeutic procedures taking into account the leading clinical manifestations of post-COVID syndrome;
- 2) various types of massage;
- 3) specially designed gymnastics, including breathing and neuropsychological exercises;
- 4) consultation and classes with a psychologist, cognitive educator, speech therapist;
- 5) pharmaceutical treatment (strictly individualized).

Children with pronounced clinical manifestations of neurological decompensation are prescribed neuroangioprotectors and nootropic drugs by a neurologist, depending on the data of ultrasound Dopplerography of cerebral vessels, electroencephalogram, and in some cases — the results of magnetic resonance tomography.

Effectiveness: nafter a 10-day rehabilitation course all children showed positive dynamics:

- 58,3% of toddlers showed normalization of sleep, behavior and appetite;
- 63.3% of preschoolers had improved behavior and sleep, 10.0% had normalized articulation motor skills;
- 61.5% of junior schoolchildren improved their voluntary attention and mood;
- 66.4% of middle and high schoolchildren got relief from headaches, restored their work capacity and cognitive functions, and normalized their emotional background.

CONCLUSION

The NCVI pandemic and forced self-isolation of the population necessitated changes in the of work of the pediatric polyclinic, especially in terms of preventive activities. Active use of electronic technologies allowed to preserve the

possibility of interaction between the district pediatrician and parents concerning child care, nutrition, vaccination, education. Moreover, it helped to maintain feedback and answer actual questions of parents, which contributed to the improvement of medical literacy of parents regarding child health as well as to prevent violations. The use of digital resources contributed to early detection of mental health disorders in two-year-old children, as well as signs of post-COVID syndrome in children of different age groups by increasing the coverage of parents with the questionnaires.

The organization of cooperative work of a whole team of specialists at one time and in one place made it possible to conduct complex preventive medical check-ups of children, reducing the number of visits, minimizing the time spent in the polyclinic, as well as excluding the intersection of patient flows, who came for preventive and other purposes. This form of work made it possible to continue solving one of the main tasks of the children's polyclinic, i.e. early detection of health disorders in children, in conditions of limited social contacts.

The creation of a united electronic database of medical records in the medical and social assistance office helped to increase the coverage of medical check-ups for families at social risk. It also facilitated interdepartmental cooperation between the polyclinic and the social protection authorities.

Modernization of the medical rehabilitation department's activities and a shift in focus to providing complex care for children with post-COVID health disorders have contributed to the restoration of impaired functions in a short period of time, with the predominant use of non-medical treatment methods.

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 статьи, 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., Ustinova N.V. Sos'toyaniye i zadachi sovershenstvovaniya mediko-sotsial'noy pomoshchi detskomu naseleniyu. [The state and tasks of improving medical and social assistance to the child population]. *Voprosy sovremennoy pediatrii*. 2020; 19(3): 184–9 (in Russian).
2. Vsemirnaya organizatsiya zdravookhraneniya (VOZ). RAS (RAS). [World Health Organization (WHO). RAS (RAS)]. Available at: <https://www.who.int/ru/news-room/fact-sheets/detail/autism-spectrum-disorders> (accessed: 3.12.2019) (in Russian).
3. Prikaz MZ RF ot 10.08.2017 g. № 514-n "O poryadke provedeniya profilakticheskikh meditsinskikh osmotrov nesovershennoletnikh". [Order of the Ministry of Health of the Russian Federation No. 514-n dated 10.08.2017 "On the procedure for preventive medical examinations of minors"]. Available at: <http://publication.pravo.gov.ru/Document/View/0001201708210001> (accessed: 30.10.22) (in Russian).
4. Prikaz MZ RF ot 13.06.2019 g. № 396-n "O vnesenii izmeneniy v poryadok provedeniya profilakticheskikh meditsinskikh osmotrov nesovershennoletnikh, utverzhdennoy prikazom Ministerstva zdravookhraneniya Rossiyskoy Federatsii ot 10 avgusta 2017 g. № 514-n". [Order of the Ministry of Health of the Russian Federation No. 396-n dated 13.06.2019 "On Amendments to the Procedure for preventive medical examinations of minors, approved by Order of the Ministry of Health of the Russian Federation No. 514-n dated August 10, 2017"]. Available at: <http://publication.pravo.gov.ru/Document/View/0001201910040014> (accessed: 30.10.22) (in Russian).
5. Protasova L.M., Masunov V.N., Bojkov V.A. i dr. Opyt vnedreniya tekhnologiy berezhlivogo proizvodstva v zdravookhraneni: obzor luchshikh praktik. [Experience in implementing lean manufacturing technologies in healthcare: an overview of best practices].

- Sotsial'nyye aspekty zdorov'ya naseleniya. 2019; 4(68): 1–35. Available at: <https://cyberleninka.ru/article/n/opyt-vnedreniya-tehnologiy-berezhlivogo-proizvodstva-v-zdravoohranenii-obzor-luchshih-praktik> (accessed: 6.12.2019) (in Russian).
6. Skvortsov I.A. Detskiy autizm v nevrologii. [Children's autism in neurology]. Moskva: MEDpress-inform Publ.; 2020 (in Russian).
4. Приказ МЗ РФ от 13.06.2019 г. № 396-н «О внесении изменений в порядок проведения профилактических медицинских осмотров несовершеннолетних, утвержденный приказом Министерства здравоохранения Российской Федерации от 10 августа 2017 г. № 514-н». Доступен по: <http://publication.pravo.gov.ru/Document/View/0001201708210001> (дата обращения: 30.10.2022).
5. Протасова Л.М., Масунов В.Н., Бойков В.А. и др. Опыт внедрения технологий бережливого производства в здравоохранении: обзор лучших практик. Социальные аспекты здоровья населения. 2019; 4(68): 1–35. Доступен по: <https://cyberleninka.ru/article/n/opyt-vnedreniya-tehnologiy-berezhlivogo-proizvodstva-v-zdravoohranenii-obzor-luchshih-praktik> (дата обращения: 06.12.2022).
6. Скворцов И.А. Детский аутизм в неврологии. М.: МЕДпресс-информ; 2020.

ЛИТЕРАТУРА

1. Баранов А.А., Альбицкий В.Ю., Устинова Н.В. Состояние и задачи совершенствования медико-социальной помощи детскому населению. Вопросы современной педиатрии. 2020; 19(3): 184–9.
2. Всемирная организация здравоохранения (ВОЗ). РАС (РАС). Доступен по: <https://www.who.int/ru/news-room/fact-sheets/detail/autism-spectrum-disorders> (дата обращения 03.12.2019).
3. Приказ МЗ РФ от 10.08.2017 г. № 514-н «О порядке проведения профилактических медицинских осмотров
5. Протасова Л.М., Масунов В.Н., Бойков В.А. и др. Опыт внедрения технологий бережливого производства в здравоохранении: обзор лучших практик. Социальные аспекты здоровья населения. 2019; 4(68): 1–35. Доступен по: <https://cyberleninka.ru/article/n/opyt-vnedreniya-tehnologiy-berezhlivogo-proizvodstva-v-zdravoohranenii-obzor-luchshih-praktik> (дата обращения: 06.12.2022).
6. Скворцов И.А. Детский аутизм в неврологии. М.: МЕДпресс-информ; 2020.