Modern assessment of correlation interconnection in children with cardiac arrhythmia from 3-6 years between cardiac arrhythmia and dangerous factors in the turkestan region

Evaluación moderna de la interconexión de correlación en niños de 3 a 6 años entre arritmia cardiaca y factores peligrosos en la región de turquesta

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Abstract

During our research, there is a clear analysis of the correlation and regression among children with Cardiac arrhythmia of preschool age and dangerous causes. As a result, children's health groups are identified and the epidemiological character of administrative districts is determined. Scientific features were found: the need for pediatric medical care in each region and the specific needs of individuals who provide care. The model of the organization of pediatric care for children with Cardiac arrhythmia under the age of 6 years is evaluated and evaluated, depending on the characteristics of each administrative district.

Keywords: children, diseases, disability, Cardiac arrhythmia, assessment.

Resumen

Durante nuestra investigación, hay un análisis claro de la correlación y la regresión entre los niños con arritmia cardíaca en edad preescolar y causas peligrosas. Como resultado, se identifican los grupos de salud infantil y se determina el carácter epidemiológico de los distritos administrativos. Se encontraron características científicas: la necesidad de atención médica pediátrica en cada región y las necesidades específicas de las personas que brindan atención. Se evalúa y evalúa el modelo de organización de la atención pediátrica para niños con arritmia cardíaca menores de 6 años, según las características de cada distrito administrativo.

Palabras clave: niños, enfermedades, discapacidad, arritmia cardíaca, evaluación.

Relevance: Information about children's health plays a special role in public health. In recent years, many studies have been published on topical issues of children's health. Analyzed trends in the field of health, identified health problems, identified ways to solve them in the work of many pediatricians.

Many authors emphasize growing concerns about children's health. According to some authors, the health of the nation, healthy people of fertile age, is mainly determined by their ability to reproduce the quality of the population and descendants. Parts of reproductive health include reproductive health of children with Cardiac arrhythmia and adolescents, safe sexual intercourse, effective and affordable methods of birth control, safe pregnancy and the birth of healthy children. Worsening of the health of mothers and newborns leads to a decrease in the quality of the reproductive system and an increase in morbidity due to a reduction in the number of children with Cardiac arrhythmia. Children's health is regulated by a dynamic process and a biosocial category.

Many research papers have identified specific patterns in shaping children's health, which will serve as the basis for effective health promotion and advancement in the modern environment[1-4]

Analysis of the situation in dynamics is the basis for the application of planning and management of health planning, which allows you to solve the problems of the in-

dustry as a whole and its pediatric services as soon as possible. This approach is based on the optimal use of material, financial and human resources, the formation of specific priorities and the best ways to overcome them in the near future. In today's world, it is important to integrate all departments, services, and structures that can provide programmatic and targeted activities in the interests of maternal and child - it is organization, funding, and implementation[5-7].

The dangerous increase in morbidity and disability among children with Cardiac arrhythmia necessitates the mobilization of all the forces of society, as well as an increase in their functional capabilities and resources of the body to combat these trends, especially to prevent childhood diseases and disabilities between the ages of 3 and 6 years[8].

In this case, it is not enough to understand the laws of the formation and development of children's health as an objective phenomenon. Determining the health of children with Cardiac arrhythmia in the regions, territories and different groups of children with Cardiac arrhythmia is possible only if there is clear information about the social homogeneity of this phenomenon[9].

Thus, it made it possible to identify the most important problems of studying children's health and the issues of protecting children's health. Comprehensive medical and social research on these key issues is still not enough[10].

Many authors noted that the period of formation of chronic pathologies among children with Cardiac arrhythmia aged 3-6 years, however, does not include materials that have clear evidence of their work.

In a study of private scientists, a comprehensive medical examination of children with Cardiac arrhythmia showed that pathologies of the cardiovascular system, urinary tract, diseases of the genital organs and pathology of the digestive system are common. It should be noted that during the medical examination it turned out that additional diseases are added to the level of the primary disease. But scientists have redefined certain diseases of the musculoskeletal system and connective tissue, respiratory organs, diseases of the eyes and the surrounding units, the events have been identified significantly[11-13]. Many authors note the importance of determining the health of children. The identification of health groups is an indicator of the quality of screening and screening among children. This situation helps to determine the quality and availability of medical care.

Objectives:

1. Determination of the level of development, level of development of the state of primary health care, disability and morbidity, which increases the level of health of children with Cardiac arrhythmia aged 3-6 years in the Turkestan region;

2. Determination of distributional characteristics in the field of causes causing the state of health of this social group.

3. Current assessment of the correlation between the dynamics of the disease and risk factors for children with Cardiac arrhythmia aged 3-6 years in the Turkestan region.

Results and Discussion

In accordance with the objectives of the study, we studied the dynamics of the disease of preschool children with Cardiac arrhythmia during the year. The study involved preschoolers of the Turkestan region. It was attended by groups of children with Cardiac arrhythmia aged 3-6 years.

We identified a number of socio-hygienic and biomedical reasons for frequent and prolonged children with Cardiac arrhythmia aged 3-6 years (more than 4 times a year and more than 60 days). For this purpose, a survey was conducted among 400 mothers with frequently ill children with Cardiac arrhythmia and children with Cardiac arrhythmia with rarely ill ones.

The study was conducted in children's clinics of Shymkent. To provide a representative number of surveys, a unique selection of standard formulas was made. In order to identify the various harmful effects of malignant causes, Valda analysis was used based on the Bines method. The identified causes in the questionnaire were determined by the informativeness of Kulbach.

Research Results: In order to improve medical social assistance for children with Cardiac arrhythmia of preschool age and to increase the effectiveness of preventive work, it is necessary to study and analyze their incidence. This work should be carried out in different age groups of children with Cardiac arrhythmia of preschool age and should be developed separately. The organisms of childhood are exposed to the dangerous causes of the environment during their histomorphological and functional growth. This age range is from 3 to 6 years. At this age, acute pathologies often recur with chronic diseases. These diseases adversely affect the physical development of children with Cardiac arrhythmia during the development of school and adolescents, which leads to further complications of congenital and genetic pathologies. Primary health care organizations in the health care system should take these measures to protect children's health and introduce evidence-based prevention technologies.

The proper organization of children's recreational activities and the rehabilitation of preschool children with Cardiac arrhythmia in the acute group reduce their disability and reduces the disability of children with Cardiac arrhythmia by preventing chronic pathologies. The prevalence of preschool age in the Turkestan region, including 3-year-olds, was 3,742.92 per 1,000 children. Among 4-year-olds, 5,072.64 cases account for up to 4,812.82 in the 5-year-old age group and 4,492.75 in the 6-year-old age.

Table 1. Composition and incidence for children with Cardiac arrhythmia aged 3-6 (per 1000 children), International Classification of Diseases (ICD)

№	Name of the disease group by ICD	3-year-old children	%	4-year-old children	%	5-year-old children	%	6-year-old children	%
1	2	3	4	5	6	7	8	9	10
1	Infectious and parasitic disease	172,47	4,7	193,62	3,8	172,19	3,7	151,23	3,4
2	Endocrine Diseases and Metabolism	18,22	0,48	18,34	0,36	20,29	0,42	21,34	0,47
3	Rickets	24,32	0,65	32,91	0,65	24,11	0,5	22,84	0,50
4	Anemia	12,64	0,34	23,68	0,46	22,64	0,47	19, 48	0,43
5	Diseases of the nervous systems	179,42	4,89	194,51	3,87	180,78	3,84	169,95	3,80
6	Disease of the eyes and their appendages	624,92	17,03	567,32	11,13	532,34	11,74	530,94	11,89
7	Diseases of the respiratory system	2511,49	68,45	3496,57	68,93	3359,35	71,35	3073,04	68,81
8	Diseases of the digestive system	23,87	0,64	34,92	0,69	35,46	0,74	37,65	0,84
9	Diseases of the musculoskeletal system	64,97	4,49	352,38	7,03	373,11	8,38	348,03	10,0
10	Injuries and poisoning	12,73	0,34	12,94	0,25	13,65	0,28	14,53	0,32
11	Congenital malformations	46,74	3,92	47,38	2,90	48,29	3,08	49,31	3,32
12	Skin disease and subcutaneous	14,38	0,38	25,11	0,49	16,12	0,33	17,68	0,39
13	Vascular Disease	33,26	0,89	47,83	0,94	32,41	0,67	30,62	0,68
14	ENT pathology	3,49	0,09	25,13	0,49	4,72	0,09	6,11	0,13
15	**Total**	**3742,92**	**100,0**	**5072,64**	**100,0**	**4812,82**	**100,0**	**4492,75**	**100,0**

The incidence rate includes respiratory organs in all age groups in the first rank. At the age of 3 years, 68.45% (2511.49) at the age of 4 years was 72.23 or 36.7259. In the age group of 5 years, its share fell to 71.35% or to 3,359.35, and it reached 68.80% or 3,073.04 in the age group of 6 years.

The proportion of acute respiratory diseases in the respiratory organs varies from 4947% to 5095%. Respiratory diseases at the age of 3 years made up 1299.71 percent, 51.75 percent of the total number of respiratory diseases, 56.95 percent (2091.59) over 4 years and 50.54% (1697.72), and 6 years old children with Cardiac arrhythmia - 494.7% (1543.93) (Figure 6)

With age in children, the frequency of allergic diseases increases. In all children with Cardiac arrhythmia aged 3 years, allergic diseases accounted for 2.28% (57.21) of respiratory tract pathology, 2.52% (92.45) in the 4-year-old age group and 4.84% (162.71 ‰), Reaching 7.26% (226.50 ‰) in the age group of 6 years.

Thus, the share of allergic diseases from 3 to 6 years will grow rapidly, and its level will increase by 3.9 times (Figure 7).

Pathology of visual acuity (class VII) in 3-year-old children with Cardiac arrhythmia is the second largest place (624.92 or 17.03%). At the age of 4 years, 507.32% or 11.13%, 5 years 532.5 or 117.4% and 530.94 or 11.89% in 6-year-olds.

Conjunctivitis is common in this class of diseases. Its level is 162.34 at the age of 3 years and 157.51 among 4-year-olds, 151.46 among 5-year-olds and 149.64 among those under 6 years of age. Pathology hypermetric is 3 years old to 9.74 years and 6 years old drops to 4.93. Asquint of 3 years from 2.42 ‰ increased in 6 years to 7.93. In children with Cardiac arrhythmia aged 3 years, the third place is occupied by diseases of the nervous system (class VII), its frequency is 179.42 or 4.89%. In 4 years 194.51 1 or 3.87% of the total disease. With this indicator, the disease of this class takes 4th place. Among persons aged 5, 188.78 or 384% of the total incidence, 169.95% for children with Cardiac arrhythmia aged 6 and 3.80% of the total disease. In children with Cardiac arrhythmia of preschool age, the incidence of the musculoskeletal system increases from 3 to 6 years. If at the age of 3 years it is 164.97 (4.49%), 4 years - 352.38 (7.03%), 5 years - 394.82 (8.38%), 6 years - 448, 69 (10.0%) increase (Fig. 9). Among these pathologies, deformity of the foot is often observed. The prevalence among children with Cardiac arrhythmia at the age of 3 years was 109.75, by 116.28% among children with Cardiac arrhythmia at the age of 4 years old, 169.83% for children with Cardiac arrhythmia at the age of 5 years and 204.93 for children with Cardiac arrhythmia under 6 years of age increased.

In children with Cardiac arrhythmia from 3 to 6 years old damaged posture. If at the age of 3 years is 91.24 ‰, at 4 years old it is 94.83, 96.64 at the age of 5 years and 108.44 at the age of 6 years.

Among children with Cardiac arrhythmia aged 3 years, infectious diseases (grade I) are ranked 5th in the frequency of diseases. Its prevalence rate was 172.47 (47%) among

children with Cardiac arrhythmia aged 3 years, 193.62 (3.8%) children with Cardiac arrhythmia aged 4 years and 172.19 (3.7%) children with Cardiac arrhythmia aged 5 years, and 6 years old children with Cardiac arrhythmia 151.23‰ (3.4%).

The sixth place is occupied by congenital anomalies. Among children with Cardiac arrhythmia aged 3 years, its prevalence is 146.74,7, 4 years old - 147.38‰, 5 years old - 148.29 and 14931 9 - 6 years.

This age-related pathology is associated with improved diagnosis. Because the diagnosis takes into account with minor deviations. Diseases of the endocrine system reach an average of 19.79 per 1000 children with Cardiac arrhythmia aged 3-6 years. Its level ranges from 3 years 18.22‰, 4 years 18.34‰, from 5 to 20.29 and 21.34 among those who are 6 years old.

The prevalence of endocrine disease in this age group was 18.09. Endocrine diseases among 3-year-olds are 17.64‰, 17.98% over 4 years, 18.01% at the age of 5 years, 19.21 at the age of 6 years. Of these, 26.7% are children with Cardiac arrhythmia with mental disorders, and 73.3% are children with Cardiac arrhythmia in borderline conditions.

Thus, a high incidence rate is observed among children with Cardiac arrhythmia of preschool age. And the highest incidence rate is adjusted for children with Cardiac arrhythmia aged 4 years. In this age group, the spread of chronic diseases is growing: including respiratory organs, connective tissues, muscle and muscle disorders, and mental illness. As a result of the spread of morbidity in individual nosologies, the children with Cardiac arrhythmia of the Turkestan region were assigned to health groups. As a result, they accounted for 15.1% of the group, and the share of the 2nd group - 74.2%. The proportion of children with Cardiac arrhythmia belonging to the 3rd and 4th groups was 10.7 percent. Looking at this, children with Cardiac arrhythmia of preschool age do not have the best health.

In accordance with the objectives of the study, we studied the dynamics of the disease of preschool children with Cardiac arrhythmia during the year. During the study, there were two clear peaks or increased incidence in the test groups. The first real increase in incidence was observed in January. During this period, acute respiratory infections (ARI) prevailed. This is due to the fact that children with Cardiac arrhythmia are not ready to drastically change the weather (Figure 1). Turkestan is located in the heart of the harsh continental climate of Central Asia. Summer is very hot, and winter is not cold. Humidity is low. Cyclones and anticyclones are very rare. Therefore, in summer, the air temperature in summer exceeds 400°C, and in winter, the air temperature decreases to 100°C. In addition, the difference in temperature in summer and winter is 50-550C. And atmospheric air pressure shows a big difference in the seasons. The smoothness and transparency of the Earth's surface in Central Asia can lead to unstable weather.

Figure 1. SKR (Turkestan) Morbidity of children with Cardiac arrhythmia up to school age from 3 to 6 years (‰)

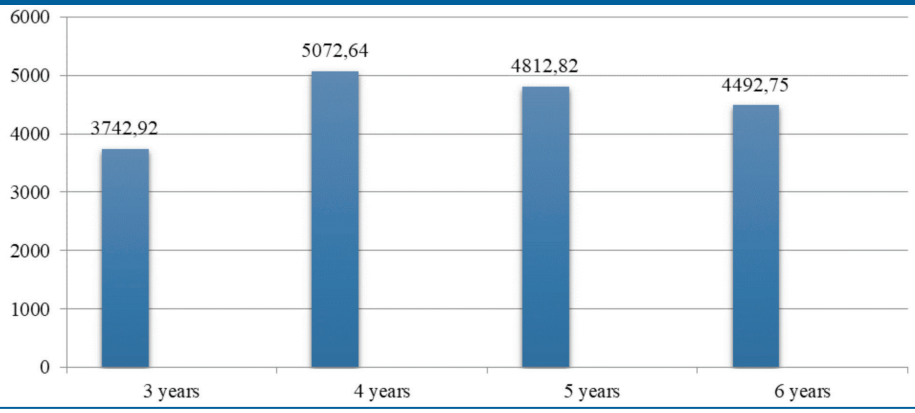
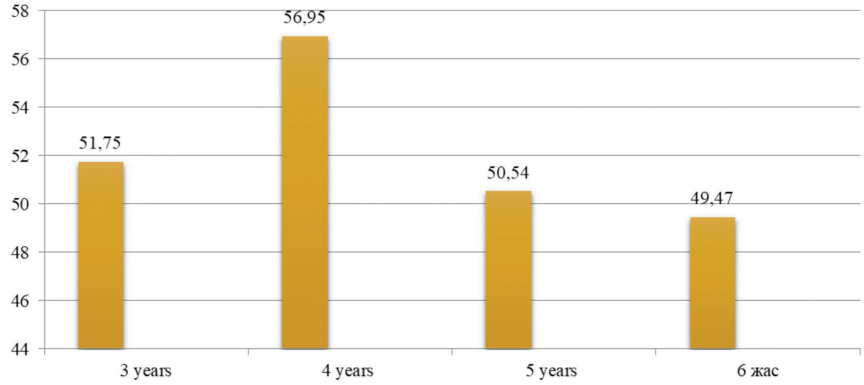


Figure 2. Features of age formation in children with Cardiac arrhythmia of the proportion of acute respiratory diseases inside the respiratory system (% ratio)



The amplitude of air heat in winter and summer adversely affects the health of children. The impact of the weather is direct and indirect. Therefore, the basic systems of the body are constantly changing. In other words, the new functional situation in children's organisms begins to work and changes in the environment.

Figure 3. Formation of the age-specific share of allergic diseases in the composition of the pathology of the respiratory system in children with Cardiac arrhythmia of preschool age (% ratio)

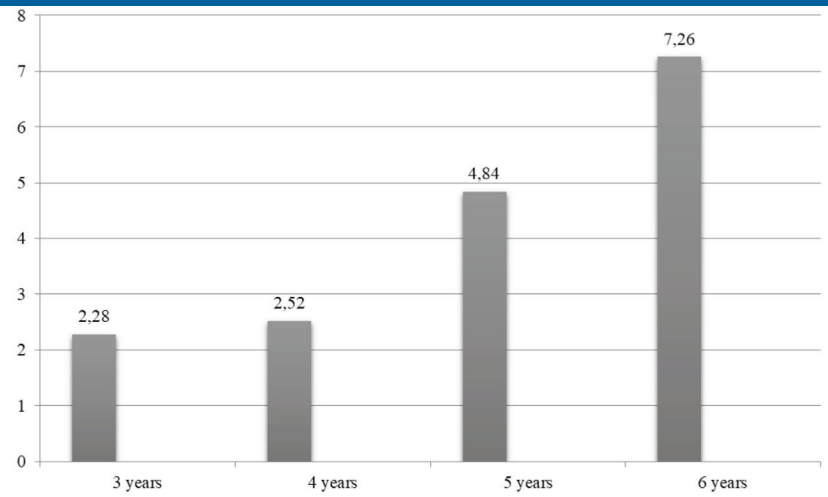


Figure 4. Dynamics of morbidity in children with Cardiac arrhythmia of the musculoskeletal, connective system in age from 3 to 6 years (% ratio)

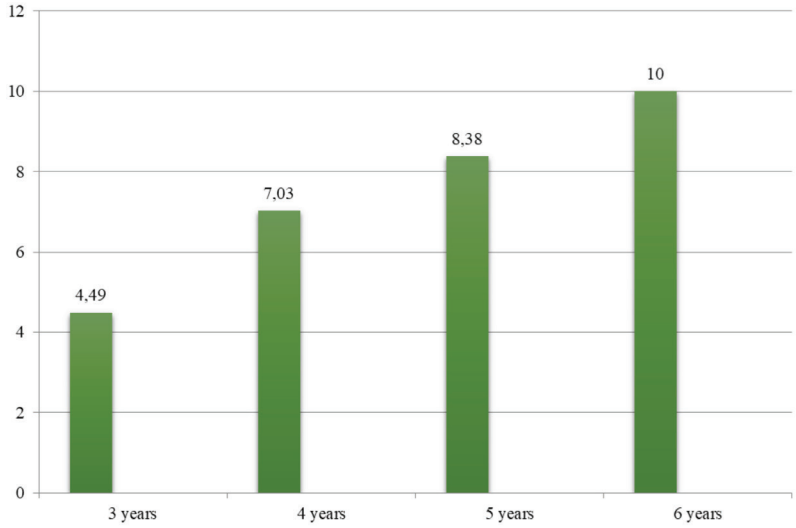
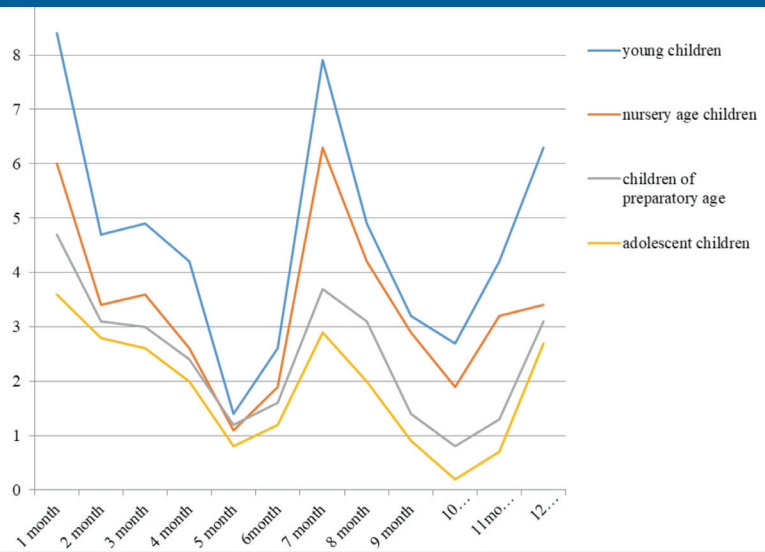


Figure 5. The dynamics of the incidence of preschool children.



When cooling January to -10°C, preschool children with Cardiac arrhythmia did not attend kindergartens in nursery groups for up to 8.4 days, 6.1 days for middle-aged groups, 4.7 days for preparatory groups and adult groups for 3.6 days. More and more younger children with Cardiac arrhythmia are increasingly reflecting an increased response to climate change.

The second increase in incidence will be in July. The air temperature this month will rise to 40° - 50°C. Children with Cardiac arrhythmia have to overheat (hyperthermia). It causes blood circulation among children, severe headaches and dyspepsia. As a result, the attendance of children with Cardiac arrhythmia in kindergarten is sharply reduced. In a small group of children, the days of illness associated with kindergarten reach 7.9 days, in the middle group - 6.3 days, in the preparatory group - 3.7 days, and adult - by 3.1 days.

Thus, adaptive reactions differ in different groups of children with Cardiac arrhythmia with a sharp decrease and increase in weather conditions. With age, their organisms adapt to changes in the environment. However, the body's ability to change in the environment is individually functionally dynamic. This is the reaction of the main organs of the body to a comfortable reaction of homeostasis. And this shows that the mechanism of adaptation to abrupt and hard environmental changes in the environment is accompanied by a high burden.

Analysis of statistical and medical materials obtained as a result of the study led to the following conclusions:

1. Dynamic changes in weather conditions show that atmospheric air fluctuates between 50° -55°.

2. Air temperature to 40° -50°C in the summer and cooling to -10°C in the winter can increase the incidence of pre-school children.

3. Adverse weather conditions in summer are associated with hyperthermia, dyspepsia and functional disorders of the central nervous system and the vascular system causing the disease. In cold weather, cold temperatures and high humidity cause acute respiratory diseases.

In order to identify the various harmful effects of malignant causes, Valda analysis was used based on the Bines method. The causes of the questionnaire were determined by the degree of informativeness of the character of Kulbach. During the study, 9% of the most frequently sick (main group) premature births were 136, and the proportion of premature babies (rarely) was below 3 (3%) below (12 children). It should be noted that more than half of the children with Cardiac arrhythmia in the main group (219 children) were breastfed for less than 6 months, and only 88 (22%) children with Cardiac arrhythmia in the comparative group were breastfed for less than 6 months. 32.5% of children with Cardiac arrhythmia in the main group (130 children) often suffered from respiratory diseases, and only 50 (12.5%) children with Cardiac arrhythmia in the comparative group were often diagnosed with these diseases.

According to sociological studies, 18.5% (74%) of the relatives of children with Cardiac arrhythmia in the main group and 7.5% of the relatives of children with Cardiac arrhythmia in the comparison group often suffered from respiratory diseases (R≤0,0001).

Studies have shown that the frequent illness of children with Cardiac arrhythmia in the family's medical activities is very low. In particular, 192 children with Cardiac arrhythmia (48%), who often was ill, did not receive timely medical care because of their illness, and the fact that the parents of children with Cardiac arrhythmia in the rarely diagnosed group did not have timely medical care was 15.5% (62 people), 42% of parents in the main group (168 families), despite the illness of the children, sent their kindergartens, and the little sick (comparable group) were admitted to kindergarten 12% or 48 cases (R≤0,0001). Failure to comply with the full therapeutic measures prescribed by doctors of the main group of parents 44% of cases (176 cases), this proportion was partially achieved was only 13% (48 cases), the comparison group, parents and doctors assigned to medical events the level of full performance (21% 84 cases), and partial execution - 3% or 12 cases (R≤0,0001).

The proportion of parents who treat at home alone (64%) among children with Cardiac arrhythmia with frequent illnesses (256 people) and rarely ill children with Cardiac arrhythmia makes up 20% (80%) among parents. And 28% of cases (112 cases) of children with Cardiac arrhythmia with frequent illness, parents refused temporary disability due to their illness, and the proportion of such cases among parents of children with Cardiac arrhythmia in the comparison group was 9% (36 cases).

Studies show that parents of children with Cardiac arrhythmia who often get sick do not take any measures to increase their body resistance, and more than half of those who rarely have parents participate in such activities among 52% of children with Cardiac arrhythmia or 208 families. While 32% of children with Cardiac arrhythmia in the main group (128 children) spend summer vacations outside the city, 74% (296 children) of the comparative group have the opportunity to relax in a man-made clean place outside the city (P≤0.01).

Parents of children with Cardiac arrhythmia with frequent illnesses have common inadequate habits. In the family of children with Cardiac arrhythmia in the main group, 47% of parents (188) smoke in their eyes, and 26% of them (104 children) use alcoholic alcohol once a week. In the relative group, the frequency of frequencies among the parents of these habits was 14% (56 children) and 10% (40 children).

In a sociological survey of the family of children with Cardiac arrhythmia suffering from frequent diseases, showed that the family is in poor social and community conditions.

29% of them (116) were incomplete, and the proportion of single-parent families was less than 12% (48) among rare children. One of the parents of children with Cardiac arrhythmia in the main group was 8% (32 years), and the frequency of such cases among rare children with Cardiac arrhythmia was 3.5% (14 children). The per capita income was below the subsistence minimum, with 18.5% (74 children) and 7% in a rare group (28 children). Of the mothers in the main group, 27% (108) reported that they are often stressful, and only 9% (36) is present in the comparison group. 14% of households (56 families) lived in dormitories and houses for newlyweds, while 3% (12 families) were among families in the comparative group. The share of them more than 5 people in one apartment was 29% (116 families) and 9.5% in rare cases (38 families).

The proportion of people attending kindergarten or bus is more than 69.5% (278 children) among the most frequently infected, and 14% among rare patients (56 children). The share of preschool and school children with Cardiac arrhythmia and siblings was 42% (170 children) and 17.5% (70 children) in the group that was rarely treated.

About 75% of children with Cardiac arrhythmia in the main group go to kindergartens, and 52.5% of children with Cardiac arrhythmia in the comparative group go to kindergartens. The incomplete use of maternity leave for the main group is 22.4% in the main group, while the relative group reaches 13%.

Thus, due to sociological studies, we were able to determine the specific causes of the disease of children with Cardiac arrhythmia of preschool age and determine their place of residence, taking into account their seriousness or reliability (Table 2).

Table 2. The family risk factor of frequently ill children with Cardiac arrhythmia of preschool age

1	2	3	4	5	6
К №	Risk factors risk factor	Main group%	Comparable group%	Information-risk factor	%
I. Medical biological causes					
11	Feeding mother milk for less than 6 months	54,75	22	51,8	12
22	The frequent incidence of respiratory diseases from an early age	38,5	12,5	27,1	6,3
33	Chronic diseases of the parents in the respiratory system	24,5	9	16,2	3,8
44	The birth of a premature baby	9	3	7,8	1,8
55	Often, respiratory diseases in relatives	18,5	7,5	7,2	1,7
II. Socio-hygienic causes					
11	Self-treatment of the child	64	20	48,2	11,2
2 2	Untimely child's visit to a doctor due to illness Children	48	15,5	36,2	8,4
3 3	Visiting sick children with Cardiac arrhythmia in kindergarten	42	12	30	6,9
4 4	The presence in the family of often stressful events	27	9	19,8	4,6
55	Failure of the mother from the leaf disease of the child	28	9	19,7	4,3
66	Smoking parents in the presence of Incomplete	47	26	17,2	4
77	Implementation of medical measures prescribed by the doctor	44	13	17	3,9
88	Refusal of medical procedures prescribed by a doctor	21	2,9	16,9	3,9
99	Accommodation in a dorm or in a rental apartment	14	3	16,7	3,9
10	Presence of brothers and sisters of preschool and school-age	42	17,5	13,7	3,2
11	The presence of per capita income below the level necessary for family life	18,5	7	12,6	2,9
12	Finding a child in the city in the summer	32	74	12,5	2,9
13	Not taking measures to improve the sustainability of the child's body in the family	82,8	52	12,2	2,8
14	Receiving alcohol once a week or more often	14	10	11,2	2,6
15	Not complete family	29	12	10,9	2,5
16	Not visiting kindergarten	75	52,5	9,2	2,1
17	Incomplete use of maternity leave by mothers	22,4	13	6,4	1,5
18	In kindergarten go by public transport	69,5	14	4,6	1,1
19	More than 5 people live in one apartment	29	9,5	4,1	0,9
20	One parent is unemployed	8	3,5	2,8	0,8

Among the causes of frequent diseases in preschool children, these are social and hygienic causes of serious health consequences (Table 1). They have a high proportion of their ability to cause illness with a serious risk of up to 75%. Among the most dangerous causes are self-treatment of children, timely treatment of children with Cardiac arrhythmia due to childhood illness, visiting kindergarten, frequent family stresses. Their overall hazard level reached 31.2%. The problem is that many of the reasons for this group are familial in nature.

Conclusions

In children with Cardiac arrhythmia aged 3-6 years, the respiratory system, muscular and connective tissue pathology, and eye diseases begin to develop chronic diseases of the mental system. As a result of the spread of incidence in individual nosologies, the children with Cardiac arrhythmia of the TFR were assigned to health groups. As a result, they accounted for 15.1% of the group, and the share of the 2nd group - 74.2%. The proportion of children with Cardiac arrhythmia belonging to the 3rd and 4th groups was 10.7 percent. In contrast, preschool children with Cardiac arrhythmia have poor health. To stop this trend, it is necessary to carry out systematic and comprehensive preventive measures.

The study revealed the medical and biological causes of early childhood diseases. These include breastfeeding for infants less than 6 months, frequent respiratory diseases, the presence of chronic respiratory diseases, premature birth, and frequent acute respiratory infections in the elderly. Thus, he helped to identify the most common causes of the disease, often occurring among children with Cardiac arrhythmia of preschool age. Most of them can be classified as "family" for dangerous reasons. The found documentary materials make it possible to create and effectively use a comprehensive family health care program aimed at preventing the frequent illness of preschoolers.

References

1. Buleshov MA, Omarova BA, Tuktibaeva S.A. Assessment of the level, structure and dynamics of cardiovascular diseases in the child population of the South-Kazakhstan region // International Scientific Practical Conference.
2. Buleshov, MA, Isaeva, A.E., Eskerova, S.U., Zhamalova, M.S. Improving the system for predicting and preventing the birth of children with Cardiac arrhythmia with congenital malformations. // Republican scientific journal "Bulletin of the South Kazakhstan Pharmaceutical Academy.- Shymkent, № 2 (63) - 2013.-P.69-70
3. Borisova, O. A. Modern medicines: The latest reference book / O. A. Borisova, I. A. Pavlov, A. E. Polovinko. - SPb.: Owl; M.: EKSMO, 2004. - 824 p.
4. Chronic bronchopulmonary diseases in children with Cardiac arrhythmia as a problem of modern pediatrics. Ed. S.Y. Kaganov, N.N. Rozinova, V.N. Nesterenko, Yu.L. Mizernitsky.M.: Academy, 2003. -300 p.
5. Chernyshenko, Yu.K. Scientific and pedagogical foundations of innovative areas in the physical education of children with Cardiac arrhythmia of preschool age: author. dis... Dr. Ped. Sciences: 13.00.04 /
6. Chernyshenko Yu.K. ; Kuban Acad. physical culture. - Krasnodar, 1998. - 50 p.
7. Drobinsky A. O. Basics of Pediatrics and Hygiene of Children with Cardiac arrhythmia of Early and Preschool Age: Uch. manual for universities. - M.: VLADOS, 2003. - 400 p.
8. Finkelstein L. O. Illness // Encyclopedic Dictionary of Brockhaus and Efron: in 86 tons (82 tons and 4 extra). - SPb., 1890-1907.
9. Ekinci, A., & Ozcan, M. (2018). Levels of Th1 and Th2 Cytokines in Patients with Nasal Polyps. Journal of Clinical and Experimental Investigations, 9(2), 71-75.
10. Al-Jiffri, O. H., & Alsharif, F. M. (2017). Levels of circulating adipokines and their relation with glycemic control and insulin resistance in Saudi patients with non-alcoholic fatty liver disease. European Journal of General Medicine, 14(4).
11. Samira Eissazadeh MP, Mohammad Sadegh Taskhiri, Mostafavi SM. Improvement of Sensitivity of Antigen-Antibody Detection of Semen Through Gold Nanoparticle. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 2019;10(1):144.
12. Nurgaliyeva, S., Zeynolla, S., Tulenova, U., Zulkarnayeva, Z., & Yespolova, G. (2018). Features of institutional autonomy of the Kazakhstan's universities. Opción, 34(85-2), 302-336.
13. Jalili, A., Hosseini Firouz, M., & Ghadimi, N. (2015). Wind Energy Uncertainties in Multi-objective Environmental/Economic Dispatch Based on Multi-objective Evolutionary Algorithm. UCT Journal of Research in Science, Engineering and Technology, 3(3), 8-15.