

# Some Characteristics of Children's Illnesses under One Year and Ways to Reduce Them

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**Abstract** Diseases of children under one year of age are one of the main indicators of public health. It is a unique barometer-indicator that shows the socio-economic development of the country, the sanitary-demographic situation of the population, the quality of medical services, the efficiency of sanitary-epidemiology, prevention and treatment. Analyzing the diseases of children under one year of age, their causes and dynamics, equips health institutions with the necessary information to improve children's health.

**Keywords** One-year-old children, Diseases, Structure, Level, Causes of diseases, Ways to reduce diseases

## 1. Introduction

Bringing up a healthy, all-around mature, well-rounded generation is one of the priority tasks of our country, not only medical and social, but also raised to the level of state policy. That is why it is one of the pressing issues of the present day to study the health of children, especially children under one year of age, the factors related to the external environment affecting them, the living conditions and lifestyle of the population, and the development of systematic science-based measures to improve the health of infants by determining the interrelationships between them. is [3,6,7,8].

The level of diseases and its reliability depends not only on the proximity and popularity of medical care to the population, but also on the timely appeal of the population to medical institutions with various diseases, full-blooded recording of the diseases detected there. This depends, firstly, on the responsibility of medical workers for their duties, knowledge and skill level, and secondly, on the medical culture of parents, their participation in the economy and production, their responsible approach to children's health, and their employment [1,2,4,5,9,10].

## 2. Aim

Diseases of children under one year of age and ways to reduce them.

## 3. Materials and Methods

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Received: Apr. 10, 2023; Accepted: Apr. 22, 2023; Published: Apr. 26, 2023

Published online at <http://journal.sapub.org/ajmms>

In order to study the diseases of children under one year of age, we studied the health of 1240 babies born in 2020-2021 in Tashkent using a short-term cohort method. We analyzed diseases according to ICD-10 (International Classification of Diseases, tenth revision), diseases were studied according to children's gender and certain age groups.

## 4. Results and Discussion

According to the results of our research, the incidence rate of children under one year of age in Tashkent was 1896.0 cases per 1000 children, and the incidence rate of boys (1943.7‰) was slightly higher than that of girls (1845.0‰). But the reliability of this difference was not confirmed statistically ( $P > 0.05$ ). In studies devoted to the study of children's diseases, it was noted that the incidence of boys under one year of age is slightly higher than that of girls.

Among the diseases of one-year-old children (in the period of 0-12 months), respiratory tract diseases take the first place in 785.5‰ (41.4%), some cases occurring in the perinatal period - 295.2‰ (15.6%), third place is congenital disorders - 275‰ (14.5%), the fourth place is endocrine system, nutrition and metabolic diseases - 243.5‰ (12.8%), and the fifth place is diseases of blood and blood-forming organs and some disorders involving the immune mechanism - It was 103.2‰ (5.4%). The mentioned 5 classes of diseases accounted for 89.8% of one-year-old children's diseases.

The growing age of children is characterized by their anatomical, physiological and mental development and their resistance to external environmental influences. In our opinion, the above factors have a positive effect on the health of children, leading to the improvement of their health and the reduction of diseases.

The results of our observations showed that with increasing age of children, their morbidity rates decrease in boys and girls (table 1).

**Table 1.** Incidence rates of children under one year of age by gender and age group (per 1000 children)

age (months)	morbidity (‰)		
	boys	girls	both sexes
0-2	648,4	563,3	607,3
3-5	498,4	495,0	496,8
6-8	407,8	405,0	406,4
9-11	389,1	381,7	385,5
0-12	1943,8	1845,0	1896,0

The highest incidence rate of children under one year of age corresponded to the period of 0-2 months (607.3‰), while the lowest rate (385.5‰) corresponded to the period of 9-11 months. It was noted that the rate of morbidity in the last age group decreased by 1.6 times compared to the first 0-2 months. Another indicator that characterizes the health of children under one year of age is the period when children's illnesses are first recorded.

32.0% of the diseases registered in children under one year of age corresponded to the period of 0-2 months, and 73.5% of the registered diseases corresponded to the first month of the child. The origin of the first recorded diseases of children in the period of 0-2 months depends on the circumstances related to pregnancy and childbirth and the care of the baby during the perinatal period. If we take into account that the main share of infant mortality (71.1%) falls on the first month of babies, we understand that in order to reduce the morbidity and mortality of children, the main attention should be paid to the medical care provided to mothers and children in the ante, intra and perinatal period. In this regard, it is necessary to further improve the quality of medical care for future mothers, especially in the period of preparation for childbirth and in the postpartum period.

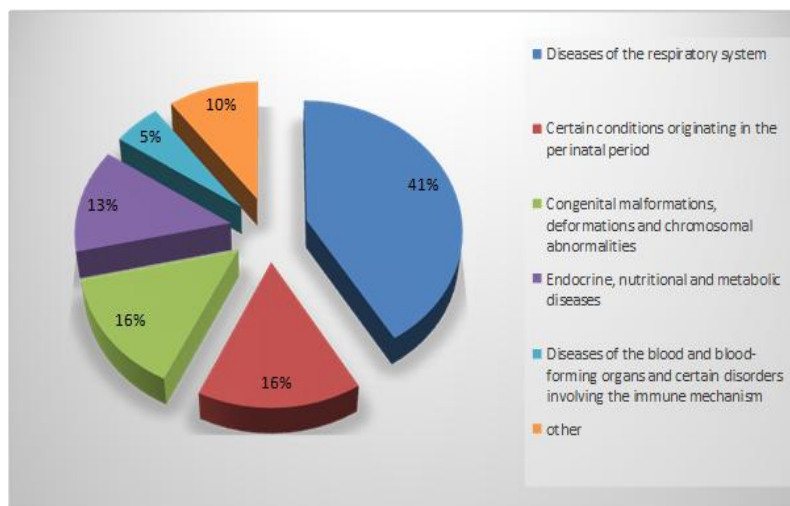
Illnesses of children in the first 3 months have their own characteristics, depending on the factors that influence their

development. In particular, in the structure and distribution of diseases in the first 3 months of children, special cases occurring during the perinatal period (41.4%; 251.6‰) take the first place.

85.2% of some cases occurring in the perinatal period (295.2‰) recorded in the first year of the child were recorded in the first 3 months of the child. Only 42.2% of congenital anomalies (275.0‰) were recorded in the first 3 months of children. Taking into account that almost 100% of the above diseases occur in the perinatal period, these diseases are detected late by family doctors in primary health care institutions, which indicates that timely measures are not taken against existing diseases in children. In order to prevent these alarming situations, in order to further improve children's health, among family doctors, professors of the department of pediatrics of medical institutes will conduct online or mobile seminars on the topic "Prevention, early diagnosis and treatment of certain conditions that occur during the perinatal period, and "Diagnosis, treatment and preventive system of congenital anomalies. improvement, and among patronage nurses, it is necessary to increase the knowledge of mothers of family members about the above-mentioned diseases, as well as conduct seminars in families on their care.

Some of the above-mentioned cases that occur in the perinatal period take the 2nd and 3rd places among children under one year of age. Along with the obstetric-gynecological support provided to mothers, it is necessary to strengthen neonatological support, improve the activities of local screening centers and cover pregnant women with them, and organize regular high-quality dispensary examinations.

Diseases of the respiratory system among children under one year of age increased with age (Table 2). Its prevalence was 126.6 cases per 1000 children in 0-2 months, and 194.3 cases in 9-11 months of age. Acute respiratory infections of the upper respiratory tract took the first place in prevalence among respiratory diseases (51.4%), the prevalence rate of which was 404.0 cases per 1000 one-year-old children.



**Figure 1.** The incidence structure of children under 1 year (%)

**Table 2.** Classes of diseases prevalent among one-year-old children (per 1,000 children by age group)

Nosology of diseases	age of the child (months)				
	0-2	3-5	6-8	9-11	0-1 ёш
1. Certain infectious and parasitic diseases	18,4	12,9	22,6	16,1	71,0
3. Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	16,1	3,2	19,4	64,5	103,2
4. Endocrine, nutritional and metabolic diseases	32,3	94,4	82,3	34,7	243,6
8. Diseases of the ear and mastoid process	20,4	3,2	-	3,2	25,8
10. Diseases of the respiratory system	126,6	237,9	226,6	194,4	785,5
11. Diseases of the digestive system	-	9,7	-	9,7	19,4
12. Diseases of the skin and subcutaneous tissue	14,5	1,6	3,2	3,2	22,6
16. Certain conditions originating in the perinatal period	251,6	28,2	4,0	11,3	295,2
17. Congenital malformations, deformations and chromosomal abnormalities	116,1	96,8	38,7	23,4	275,0
19. Injury, poisoning and certain other consequences of external causes	-	2,4	7,3	8,1	17,7
20. External causes of morbidity and mortality	1,6	4,8	2,4	7,3	16,1
other diseases	9,7	1,6	-	9,7	21,0
<b>Total diseases</b>	<b>607,3</b>	<b>496,8</b>	<b>406,5</b>	<b>385,5</b>	<b>1896,0</b>

Among the diseases of the respiratory system, other diseases of the lower respiratory tract (122.6‰) and pneumonia (76.6‰) take the leading place. Other diseases of the lower respiratory tract were recorded most often in children aged 3-5 months (35.5‰), 6-8 months (45.2‰), and pneumonia was most common (37.9‰) in children aged 3-5 months. As can be seen from the above, there are many ways to reduce respiratory diseases among children: first of all, mothers should pay special attention to the issues of proper care of children, taking them for walks in fresh air, bathing, exercising, and breastfeeding. In this case, patronage nurses should provide practical assistance to mothers in families with 0-6 month old babies in the care of children during active visits to the family with an individual approach.

## 5. Conclusions

1. In the city of Tashkent, the overall level of children's disease was 1896.0 cases per 1000 children of this age group in the first year of life. As the age of the child increased, the incidence rates decreased. Although it is noted that the incidence rate of first-year-old boys is slightly higher than that of girls, this difference is not statistically significant ( $r > 0.05$ ).
2. The incidence rate and structure of children under one year of age include diseases of the respiratory system (41.4%), special conditions occurring during the perinatal period (15.6%), diseases related to the endocrine system, metabolic disorders (12.9%), congenital anomalies (14.5%), diseases of blood and blood-forming organs and certain disorders involving immune mechanisms (5.4%) took the leading places. These diseases accounted for 89.7% of all diseases in the first year of children.

3. In children under one year of age, it was found that the highest morbidity rate corresponds to the first three months of their life (607.3‰), and the lowest to the period of 9-11 months (385.5‰). In 32.0% of cases, the first illness or disease was recorded in the first month of the child's life, while 72.5% of the diseases recorded in the first three months of the child's life were recorded in the period of 0-1 months. So it was found that the period of 0-2 months of the child is of great importance in the health and upbringing of children.
4. The leading positions in the level and structure of children's diseases in the period of 0-2 months were given by special situations that occurred during the perinatal period (41.4%). The morbidity of babies with certain conditions that occurred in the perinatal period was 251.6 cases per 1000 children in this age group. Among the diseases of this class, perinatal injuries of the nervous system (PPNS), asphyxia and injuries of respiratory disorders during childbirth, congenital jaundice took the lead.

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