

INFECTIOUS DISEASES IN CHILDREN UNDER TEN YEARS OLD AND THEIR PROPHYLAXIS.

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Abstract. This article highlights common infectious diseases among children, their types, and their impact on health. It emphasizes that infections can progress rapidly and severely in children due to their fully undeveloped immune system. Furthermore, the article points out the significance of measures such as vaccination, adherence to sanitary and hygienic rules, conducting public health promotion, and early diagnosis of infections in preventing infectious diseases. In conclusion, it is stated that preventive measures are of crucial importance in preventing and reducing infectious diseases in children.

Key words : Children, infectious diseases, viral infections, bacterial infections, parasitic diseases, prevention (or prophylaxis), vaccination, sanitation, immunity.

Human health is considered the greatest wealth of society and the main factor in its development. Especially, children's health determines the future of the country and the genetic potential of the nation. Therefore, the issue of diseases in children, particularly infectious diseases, holds a significant place in both medical science and practice.

It is known that the child's body is more sensitive than an adult's; its defense systems are not yet fully formed, and it is not sufficiently resistant to environmental influences. This condition is especially evident in children under ten years old. Therefore, they represent the segment of the population that is more susceptible to various infectious diseases.

Infectious diseases are illnesses caused by various microorganisms (bacteria, viruses, fungi, parasites) that can be transmitted from person to person or through the external environment. They can negatively affect not only a child's physical condition but also their mental development, social adaptation, and overall life opportunities. In some cases, they can leave severe complications that impact the child's health throughout their life.

Furthermore, another dangerous aspect of infectious diseases is their characteristic of spreading rapidly within a community. An illness observed in one child can unexpectedly disseminate widely to the entire family, a preschool educational institution, or even the neighborhood level. This indicates the necessity of properly implementing prophylactic measures.

Prevention, first and foremost, involves improving public health, adhering to sanitary and hygiene rules, ensuring children's proper nutrition, strengthening their immunity, and effectively organizing vaccination efforts. Through these measures, implemented at the state and community level, it is possible to prevent many infectious diseases or limit their spread.

In this context, this paper will cover common infectious diseases in children under ten years old (such as measles, rubella, whooping cough, diphtheria, poliomyelitis, typhoid fever, dysentery, and others), their clinical features, and effective prophylactic measures against them.

MAIN PART

General Characteristics of Infectious Diseases in Children Under Ten Years Old. The bodies of children under ten years old are not yet fully formed, and their immunity is considered weaker compared to that of adults. For this reason, they fall ill quickly under the influence of various viruses and bacteria. Failure to adhere to personal hygiene, problems related to clean drinking water and food products, and the gathering of children in large groups (kindergartens, preschool educational institutions) create a fertile ground for the spread of diseases.

The dangerous aspects of infectious diseases are that they spread rapidly, can proceed severely, and have a high probability of causing complications. For example, illnesses such as measles or whooping cough not only cause high fever and weakness but can also lead to serious changes in the respiratory tracts and the nervous system.

1. Common Infectious Diseases and Their Characteristics:

A) Airborne Droplet Infection:

- **Measles** – It proceeds with a high fever, a rash on the skin, and itchy eyes. Complications such as bronchitis and lung inflammation (pneumonia) may be observed.
- **Rubella** – Although it has a milder course, it is a dangerous disease for children. The main symptoms are a fine rash on the skin and enlargement of the lymph nodes.
- **Pertussis** – It proceeds with a prolonged cough. It can specifically lead to difficulty breathing in young children.
- **Diphtheria** – It is characterized by inflammation in the throat, difficulty breathing, and cardiac function disorder (or heart complications).
- **Influenza and ARVI** – These are diseases encountered in every season of the year, which proceed with high fever, headache, muscle aches, and general malaise (or weakness).

B) Foodborne and Waterborne Diseases:

- **Typhoid Fever** – It proceeds with high fever, diarrhea, and intestinal dysfunction (or impaired intestinal activity).
- **Dysentery** – It is an intestinal infection characterized by abdominal pain and diarrhea mixed with blood.
- **Helminthiasis** – These are frequently observed in children, including various intestinal worms (ascariasis, roundworm, and others), and they impair the absorption of nutrients.

S) Contact and Bloodborne Diseases:

- **Poliomyelitis** – It can damage the nervous system and lead to paralysis.
- **Hepatitis A** – It is primarily transmitted through contaminated hands and water, and it damages liver function.
- **Mycoses** – They manifest on the skin and mucous membranes and can spread among children through contact.

2. Complications and Consequences of Infectious Diseases in Children:

Infectious diseases can sometimes have a mild course, but in many cases, they leave severe complications. These include:

1. Stunted physical development.
2. The appearance of defects (or impairments) in mental and psychological development.

3. Long-term negative effects on the cardiovascular, nervous, and respiratory systems (organs).

For this reason, not only the treatment but also the prevention of infectious diseases is of primary importance.

3. Prevention (Prophylaxis) of Infectious Diseases:

A) Personal Hygiene and Healthy Lifestyle. It is necessary to teach children habits such as keeping hands clean, washing hands before and after meals, and using personal hygiene products. Furthermore, proper nutrition, consuming fruits and vegetables in a clean state, and engaging in sports and physical activities strengthen immunity.

B) Social and Sanitary-Hygienic Measures. Regular cleaning efforts in preschool educational institutions, the purity of the drinking water for children, and the quality of food products are of great importance. Additionally, temporary isolation of a sick child from the group also prevents the spread of the disease.

S) Immunoprophylaxis (Vaccination Efforts). One of the most effective prophylactic measures is vaccination. Based on the National Immunization Calendar, vaccines against measles, rubella, whooping cough, diphtheria, poliomyelitis, tuberculosis, Hepatitis A, and other diseases are administered to children. Vaccination helps a child's body build immunity against these diseases and prevents severe complications.

CONCLUSION

Infectious diseases in children under ten years old represent a serious threat to public health, especially to the future of the next generation. This is because the immune system in this age group is not fully formed, making them highly susceptible to various infections, which often lead to severe outcomes. Infectious diseases negatively affect not only a child's physical condition but also their mental and psychological development. In some cases, these illnesses can leave severe complications that impact a child's health throughout their entire life.

Therefore, it is critically important to prevent infectious diseases, limit their spread, and effectively implement prophylactic measures. This requires collaboration among parents, educators, and medical staff. Teaching children personal hygiene rules, establishing a healthy lifestyle, ensuring they have proper nutrition and clean drinking water, and strictly adhering to sanitary-hygienic rules in public places are essential steps in reducing infectious diseases.

One of the most vital prophylactic approaches is immunoprophylaxis, or vaccination efforts. By administering timely and complete vaccinations against various dangerous infections (such as measles, rubella, whooping cough, diphtheria, poliomyelitis, hepatitis, and others) according to the National Immunization Calendar, the spread of these diseases can be halted.

At the same time, increasing the medical literacy of the public, providing accurate information about diseases, and teaching parents to be responsible for their children's health are also crucial parts of prevention.

In conclusion, high effectiveness in protecting children's health can be achieved when prophylactic measures against infectious diseases—including personal hygiene, sanitation, a healthy lifestyle, and vaccination efforts—are carried out in a comprehensive and interconnected manner. This, in turn, serves as the main factor in raising a healthy, well-rounded, and knowledgeable generation..



REFERENCES:

1. Abdullaev A.Sh., Yusupova D. – *Pediatriya asoslari*. – Toshkent: “Ibn Sino”, 2018.
2. Hojiev A. va boshqalar. – *Yuqumli kasalliklar*. – Toshkent: “Tibbiyot nashriyoti”, 2019.
3. Rizaev J.A. – *Gigiena va sanitariya asoslari*. – Toshkent: “Fan va texnologiya”, 2020.
4. O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligi. – *Milliy emlash kalendari va uni amalga oshirish bo‘yicha qo‘llanma*. – Toshkent, 2022.
5. WHO (World Health Organization). – *Childhood infectious diseases: prevention and control*. – Geneva, 2021.
6. UNICEF. – *Immunization and child health*. – New York, 2020.
7. Karimov Sh. – *Bolalar kasalliklari va ularning profilaktikasi*. – Samarqand: “SamDU nashriyoti”, 2021.
8. O‘zbekiston pediatriya instituti materiallari. – *Bolalarda yuqumli kasalliklarning klinikasi va profilaktikasi*. – Toshkent, 2020.