DIARRHEAL DISEASES: GLOBAL IMPACT, RISKS, AND PREVENTION

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Annotation. Socio-economic, cultural and geographical factors, the age of patients, their body condition and living conditions play an important role in the occurrence and development of intestinal diseases in adults. The improvement of living conditions and sanitation for children in our country is probably due to a decrease in the incidence rate in the country. When developing practical recommendations to study the causes of the increase in the number of diseases and deaths among children and to reduce them, it is necessary to take into account all factors affecting the health of the population, including the degree of infection.

Key words: Prevention, diarrhea, children, transmission route,infectious diseases.

Diarrheal diseases are widespread and common across the globe. They are among the illnesses that not only occur frequently but also cause significant economic losses, making them a central focus for researchers worldwide. The severe and prolonged course of these diseases, particularly in children, leads to a considerable increase in mortality rates, which drives continuous scientific inquiry and research in this field.

It is particularly important to note that these diseases not only lead to the premature death of children or cause substantial economic damage, but also pose a threat to the foundation of forming a healthy generation. This, in turn, affects both the physical and mental development of the child — resulting in irritability, apathy, weakness, and a greater susceptibility to superstitions and illnesses. Consequently, it leads to both moral and additional economic losses for society.

Moreover, diarrheal diseases often create the foundation for chronic somatic illnesses such as gastritis, enteritis, enterocolitis, colitis, and others — leaving individuals suffering for a lifetime or even becoming disabled. Intestinal infections are widespread worldwide, and millions seek medical help each year due to these

conditions. These infections are prevalent not only in developing countries but also in developed ones. They are typically transmitted through contaminated food or water, with primary causes being poor sanitation and improper food handling and storage practices.

Diarrheal diseases can be caused by bacteria, viruses, or parasites. During the summer months, rising temperatures and increased human interaction with water, fruits, vegetables, and food lead to a surge in intestinal infections and gastroenteritis. These seasonal infections are mainly due to failure to follow hygiene and safety guidelines and consuming unclean water or contaminated food. In hot weather, food spoils quickly, allowing bacteria and viruses to proliferate. Many people also neglect hygiene rules during eating, and drinking untreated water adds further risk.

In the summer, people often travel more and go to beaches and recreational areas, increasing interpersonal contact and facilitating the spread of viruses and bacteria — such as norovirus and rotavirus, which spread rapidly during summer. Lack of clean water and neglect of sanitation in this season significantly heighten infection risks. Diarrheal diseases are often transmitted through unboiled water. Children and the elderly are especially vulnerable due to weaker immune systems.

Despite increasing temperatures in summer, storing food for long periods, not maintaining required temperatures, or consuming improperly stored food all contribute to rising infections. Intestinal infections are particularly dangerous for children, the elderly, and pregnant women. Their underdeveloped or weakened immune systems make it harder to fight off infections.

In children, intestinal infections can lead to severe complications very quickly — especially dehydration, as the loss of water and electrolytes becomes a major issue. This can rapidly turn critical and require immediate medical attention. Children often experience fever and pain during such infections, which may distress them physically and emotionally. Children also spend a lot of time in public spaces (schools, kindergartens, etc.), contributing to the wide spread of infections.

Elderly individuals, especially those over 65, often have weakened immune systems and declining physical conditions, increasing the likelihood of severe complications from intestinal infections. They also struggle more with maintaining hydration, and infections can rapidly accelerate fluid loss, requiring urgent medical care. Dehydration, salt imbalance, and the effects of infections can cause drastic changes in blood pressure and demand precise diagnosis and treatment. Elderly individuals typically require prompt and effective medical care to manage these conditions.

Pregnant women are also at special risk from intestinal infections, as the infections can harm both the mother and the developing fetus. The body of a pregnant woman undergoes specific changes that can intensify the impact of infections. Additionally, fluid and mineral loss may harm the fetus. Toxicoses resulting from infections, such as high fever and headaches, can also negatively affect fetal development. If a pregnant woman contracts an infection, medical supervision is essential to ensure it does not adversely affect the fetus. Infection may result in low birth weight, making timely treatment of any infection crucial.

To prevent intestinal infections, it is important to follow these key measures:

- Wash hands thoroughly before eating and after using the restroom to reduce the spread of infections.
- Ensure food is properly cooked and kitchen utensils are cleaned thoroughly.
- Avoid drinking unclean or untreated water, as it increases the risk of infection.
- Protect food from flies and other carriers of infection.
- Use vaccines — for example, rotavirus vaccine is recommended for children to prevent viral intestinal infections.
- Seek medical help immediately if signs of intestinal infection appear, as delayed treatment can lead to serious complications.

Conclusion: In summary, significant progress has been made in treating and preventing acute diarrheal diseases, and there are a number of effective recommendations and practices that are crucial for their rational management and prevention. However, developing and implementing simpler, more effective, and more practical prevention methods tailored to specific climatic and geographic

regions remains a current necessity. Building knowledge and skills for primary prevention of diarrheal diseases — especially among sensitive groups like children — will not only help prevent acute diarrheal diseases but also reduce the spread of other infectious diseases.

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