

Intestinal parasites: A hidden threat to human health.

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Introduction

Intestinal parasites are a diverse group of organisms that can infect the human gastrointestinal tract, causing a wide range of health problems. These parasites can be broadly categorized into two main groups: helminths (worms) and protozoa (single-celled organisms). While intestinal parasites are often associated with developing countries, they can be found worldwide, affecting millions of people, particularly in regions with inadequate sanitation and hygiene practices [1].

The prevalence of intestinal parasites varies across different regions and is influenced by factors such as socioeconomic status, access to clean water, and sanitation facilities. This communication aims to shed light on the significance of intestinal parasites, their modes of transmission, and the impact they have on human health [2].

Prevalence and Distribution

Intestinal parasites are not limited to any specific geographical area and can be found in both developed and developing countries. However, the prevalence is notably higher in low-income regions where access to clean water and proper sanitation is limited. Common intestinal parasites include roundworms (*Ascaris lumbricoides*), whipworms (*Trichuris trichiura*), hookworms (*Ancylostoma duodenale* and *Necator americanus*), giardia (*Giardia lamblia*), and *Entamoeba histolytica* [3]. The transmission of intestinal parasites can occur through various routes, including:

Contaminated Water: Consumption of untreated or contaminated water can expose individuals to protozoan parasites like *Giardia* and *Cryptosporidium*.

Foodborne Transmission: Poor food handling practices and consumption of raw or undercooked seafood can lead to infections with parasites like tapeworms (*Taenia* spp.) and flukes (*Fasciola* spp.).

Soil-Transmitted Helminths: Walking barefoot on contaminated soil can lead to the penetration of hookworm larvae through the skin, causing infections.

Fecal-Oral Route: Ingestion of fecally contaminated food, water, or objects can result in infections with a variety of intestinal parasites.

Person-to-Person Transmission: Direct contact with infected individuals, particularly in crowded and unsanitary conditions, can facilitate the spread of certain intestinal parasites.

Health Implications

The presence of intestinal parasites can have various health consequences, ranging from mild discomfort to severe illness. Common symptoms of intestinal parasitic infections include diarrhea, abdominal pain, nausea, vomiting, weight loss, and fatigue. Chronic infections can lead to malnutrition and anemia, particularly in children, which can hinder physical and cognitive development [4].

Furthermore, some intestinal parasites can cause long-term complications. For instance, whipworm infections can lead to chronic dysentery, while hookworms can cause iron-deficiency anemia due to blood loss in the intestines. Protozoan parasites like *Giardia* and *Entamoeba histolytica* can result in severe diarrhea and, if left untreated, may lead to dehydration and even death [5].

Conclusion

Intestinal parasites remain a significant public health concern globally, especially in regions with limited access to clean water and sanitation facilities. These parasites can cause a wide range of health problems, from mild gastrointestinal symptoms to severe malnutrition and anemia, with children being particularly vulnerable. Therefore, efforts to control and prevent intestinal parasitic infections should be a priority in affected areas.

Preventive measures such as improved sanitation, access to clean water, and health education are crucial in reducing the transmission of intestinal parasites. Additionally, regular deworming programs and the development of safe and effective treatments are essential in managing and controlling these infections. In conclusion, intestinal parasites are a hidden threat to human health that disproportionately affects vulnerable populations in low-resource settings. It is imperative that public health initiatives and research efforts continue to address this issue to improve the well-being of millions of individuals worldwide.

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Received: 13-Sep-2023, Manuscript No. AAPDDT-23-116777; Editor assigned: 14-Sep-2023, PreQC No. AAPDDT-23-116777(PQ); Reviewed: 28-Sep-2023, QC No. AAPDDT-23-116777; Revised: 29-Sep-2023, Manuscript No. AAPDDT-23-116777(R); Published: 14-Oct-2023, DOI: 10.35841/2591-7846-8.4.158

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