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CLINICAL FEATURES AND PREVENTIVE MEASURES OF GASTROINTESTINAL DISEASES IN SCHOOL-AGED CHILDREN

Tashkent State Medical University,

Assistant of the Department of Propaedeutics of Pediatric Diseases No. 1,

Atabekova Umidakhon Abdupatto kizi

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Abstract: Gastrointestinal diseases are among the most common health problems in school-aged children and adolescents. Disorders such as гастрит, gastroenteritis, functional dyspepsia, constipation, and intestinal infections significantly affect physical development, nutrition, school attendance, and quality of life. This study aimed to evaluate the clinical characteristics of gastrointestinal diseases in children aged 7 to 18 years and to analyze effective preventive measures. A prospective observational study was conducted involving 30 patients treated in a pediatric department over a six-month period. Clinical symptoms, laboratory findings, risk factors, complications, and preventive strategies were assessed. Abdominal pain, nausea, appetite loss, diarrhea, and constipation were the most common symptoms. Poor dietary habits, irregular meal patterns, stress, and inadequate hygiene were identified as major contributing factors. Preventive measures including balanced nutrition, hygiene education, regular medical screening, and healthy lifestyle promotion demonstrated significant benefits in reducing disease frequency and complications.

Keywords: gastrointestinal diseases, school-aged children, abdominal pain, gastritis, prevention, pediatric gastroenterology, adolescents

Introduction

Gastrointestinal diseases represent a major pediatric health concern worldwide. School-aged children and adolescents are particularly susceptible to digestive disorders because of dietary changes, increased consumption of fast food, stress related to academic activities, and irregular eating habits.

The most frequently encountered gastrointestinal disorders in pediatric practice include:

- Acute gastroenteritis
- Chronic gastritis
- Functional dyspepsia
- Constipation
- Peptic disorders
- Intestinal parasitic infections

Digestive system diseases negatively affect nutrient absorption, physical growth, cognitive function, and psychosocial well-being. Inadequate preventive measures may result in chronic disease progression and recurrent hospitalization.

Early diagnosis and preventive interventions are essential for maintaining gastrointestinal health in children and adolescents.

Aim of the Study

To investigate the clinical features of gastrointestinal diseases in school-aged children aged 7–18 years and evaluate preventive approaches for reducing morbidity and complications.

Materials and Methods

Study Design

A prospective clinical observational study was conducted in the pediatric gastroenterology department over a six-month period.

Study Population

The study included 30 children aged between 7 and 18 years diagnosed with gastrointestinal diseases.

Inclusion Criteria

- Age between 7 and 18 years
- Presence of gastrointestinal symptoms
- Confirmed diagnosis based on clinical and laboratory findings
- Consent from parents or guardians

Exclusion Criteria

- Congenital gastrointestinal malformations
- Severe chronic systemic diseases
- Oncological disorders
- Incomplete clinical records

Distribution of Patients by Age and Gender

Age Group	Male	Female	Total
7–10 years	**5**	**4**	**9**
11–14 years	**6**	**5**	**11**
15–18 years	**5**	**5**	**10**
Total	**16**	**14**	**30**

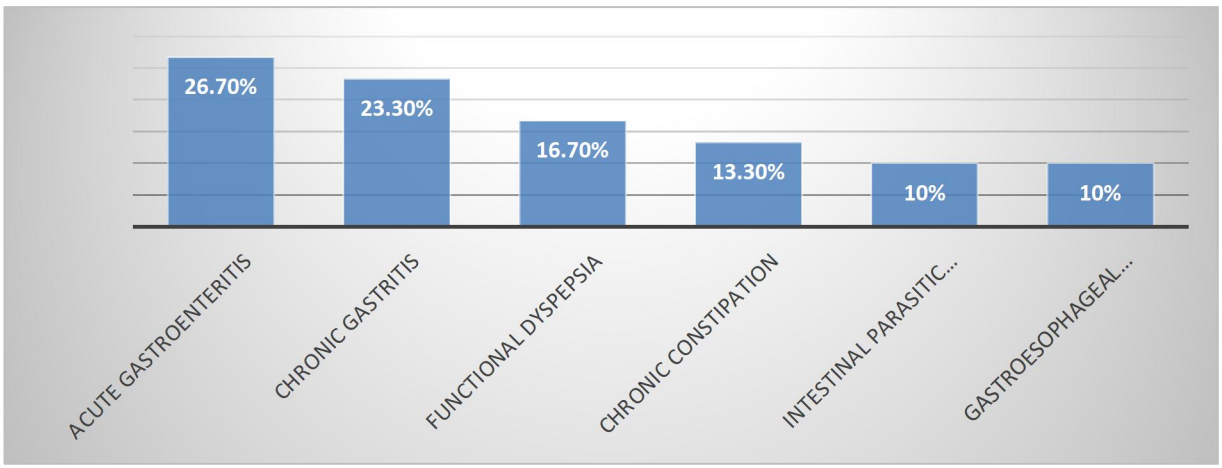
Methods of Examination

All patients underwent:

- Clinical examination
- Detailed dietary history assessment
- Anthropometric measurements
- Complete blood count
- Stool analysis
- Abdominal ultrasonography
- Endoscopic examination when indicated
- Helicobacter pylori testing in selected cases

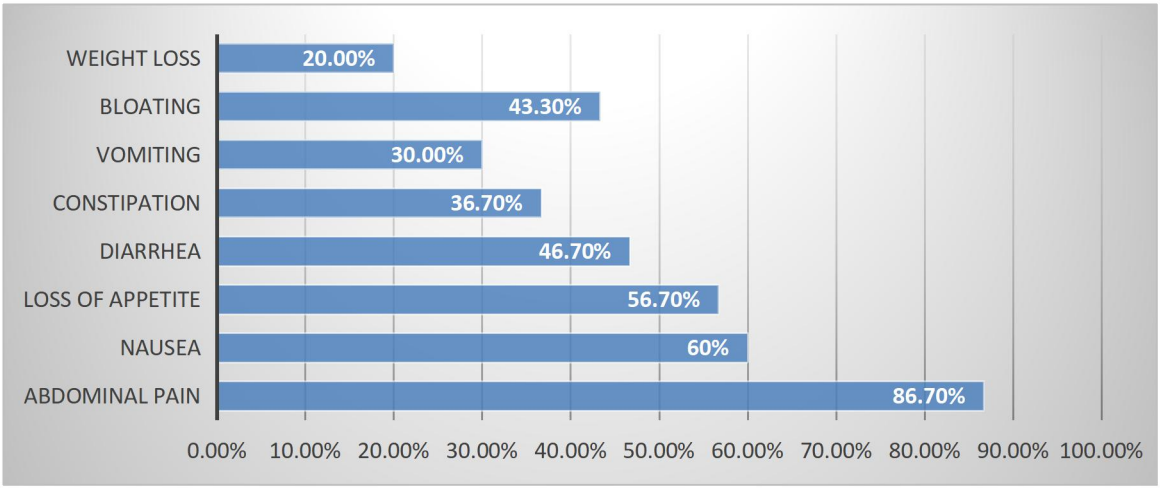
Results

Main Diagnosed Gastrointestinal Diseases



Main Clinical Symptoms:

Abdominal pain was the leading complaint among most children, especially those with gastritis and functional dyspepsia.



Clinical Characteristics of Major Diseases

Acute Gastroenteritis

Children presented with:

- Fever
- Diarrhea
- Vomiting
- Dehydration
- Abdominal cramps

Most cases were associated with viral or bacterial infections caused by poor food hygiene.

Chronic Gastritis

Clinical manifestations included:

- Epigastric pain
- Nausea
- Heartburn
- Appetite reduction
- Fatigue

Several patients tested positive for Helicobacter pylori infection.

Functional Dyspepsia

Patients experienced:

- Recurrent abdominal discomfort
- Early satiety
- Postprandial fullness
- Stress-associated symptoms

Psychological stress and irregular eating patterns were major contributing factors.

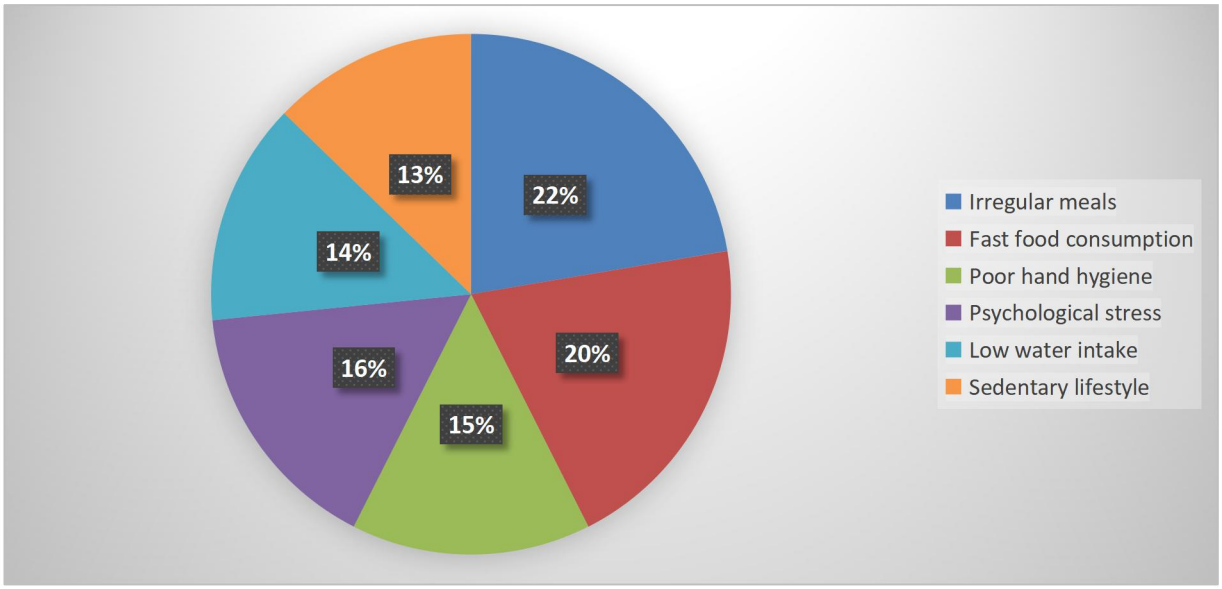
Chronic Constipation

Symptoms included:

- Infrequent bowel movements
- Hard stool
- Painful defecation
- Abdominal distension

Low dietary fiber intake and insufficient physical activity were common findings.

Risk Factors Identified



The study revealed a strong association between unhealthy dietary habits and gastrointestinal morbidity.

Preventive Measures

Balanced Nutrition

Children consuming regular balanced meals rich in:

- Vegetables
- Fruits
- Proteins
- Dietary fiber

showed fewer chronic gastrointestinal complaints.

Hygiene Education

Important preventive measures included:

- Proper handwashing
- Safe food preparation
- Consumption of clean drinking water
- Avoidance of contaminated foods

Physical Activity

Regular physical exercise improved intestinal motility and reduced constipation rates.

Psychological Support

Stress management programs and healthy school environments reduced functional gastrointestinal symptoms.

Medical Screening

Routine pediatric examinations enabled:

- Early diagnosis
- Timely treatment
- Prevention of chronic complications

Discussion

The findings of this study demonstrate that gastrointestinal diseases remain highly prevalent among school-aged children and adolescents. Acute gastroenteritis and chronic gastritis were the most common conditions observed.

Modern lifestyle changes significantly influence digestive health in children. Increased fast-food consumption, irregular meal timing, academic stress, and reduced physical activity contribute to gastrointestinal dysfunction.

Functional gastrointestinal disorders are increasingly recognized among adolescents, especially in association with psychological stress. Chronic constipation also remains an important issue due to inadequate fiber intake and sedentary behavior.

Preventive strategies focusing on nutrition, hygiene, lifestyle modification, and health education play a crucial role in reducing disease incidence and improving pediatric health outcomes.

The results emphasize the importance of multidisciplinary approaches involving pediatricians, nutritionists, schools, and families.

Conclusion

Gastrointestinal diseases in school-aged children aged 7–18 years are common and significantly affect physical and psychological well-being. Abdominal pain, nausea, diarrhea, and appetite disturbances were the predominant clinical manifestations.

Unhealthy dietary habits, stress, poor hygiene, and sedentary lifestyle were identified as major risk factors. Comprehensive preventive measures including balanced nutrition, hygiene promotion, regular medical checkups, and physical activity are essential for reducing gastrointestinal morbidity and preventing complications.

Early diagnosis and preventive intervention remain key components of pediatric healthcare.

Practical Recommendations

1. Promote regular balanced nutrition among school-aged children.
2. Limit fast-food and carbonated beverage consumption.
3. Encourage adequate water intake and dietary fiber consumption.
4. Improve hygiene education at home and school.
5. Increase physical activity and reduce sedentary behavior.
6. Provide psychological support for stressed adolescents.
7. Conduct regular pediatric and gastroenterological examinations.
8. Educate parents about early gastrointestinal symptoms and prevention.

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