AMERICAN JOURNAL OF APPLIED MEDICAL SCIENCE
ISSN: 2996-5101 (online) | ResearchBib (IF) = 10.81 IMPACT FACTOR
Volume-4| Issue-1| 2026 Published: |30-01-2026|

PERSISTENT DIARRHEA IN CHILDREN

https://doi.org/10.2591/zenodo.18269687

Z.U. Jumatova, SH.Z. Otajanov, O.U. Matyakubova, Sh.S. Masharipova
Urgench State Medical Institute

Annotation

Diarrhea continues to be a leading cause of illness and mortality in children [1]. While most episodes are acute, infection-related, and resolve on their own, diarrhea that persists for more than four weeks (classified as chronic) can indicate more serious conditions requiring specific diagnosis and treatment to prevent severe outcomes. This timely symposium gathers expert contributions to address the complexities of chronic diarrhea (CD) in children. Tripathi and Srivastava provide a foundational guide for clinicians, outlining a practical approach to diagnosing a child with CD—a process that is often challenging [2]. Their work presents diagnostic and treatment algorithms tailored to factors such as stool characteristics, patient age, and the underlying physiological cause. A key focus is the selective use of tests, from routine to specialized (including serology, imaging, endoscopy, and histopathology), with particular emphasis on the growing role of genetic testing for conditions like congenital diarrheas, monogenic inflammatory bowel disease (IBD), and immunodeficiencies. The authors also stress that effective care requires not only prompt diagnosis but also comprehensive management involving nutritional support and therapies targeted to the specific cause.

Key words

Diarrhea, CD, immunodeficiency, bowel disease.

Introduction. Celiac disease is an immune-mediated systemic disease triggered by intake of gluten in genetically susceptible individuals. The prevalence of celiac disease in the general population is estimated to be 1% in the world. Its prevalence differs depending on geographical and ethnic variations. The prevalence of celiac disease has increased significantly in the last 30 years due to the increased knowledge and awareness of physicians and the widespread use of highly sensitive and specific diagnostic tests for celiac disease. Despite increased awareness and knowledge about celiac disease, up to 95% of celiac patients still remain undiagnosed. The presentations of celiac disease have significantly changed in the last few decades. Classical symptoms of celiac disease occur in a minority of celiac patients, while older children have either minimal or atypical symptoms.

Serologic tests for celiac disease should be done in patients with unexplained chronic or intermittent diarrhea, failure to thrive, weight loss, delayed puberty, short stature, amenorrhea, iron deficiency anemia, nausea, vomiting, chronic abdominal pain, abdominal distension, chronic constipation, recurrent aphthous stomatitis, and abnormal liver enzyme elevation, and in children who belong to specific groups at risk. Early diagnosis of celiac disease is very important to prevent long-term complications. Currently, the only effective treatment is a lifelong gluten-free diet. In this review, we will discuss the epidemiology, clinical findings, diagnostic tests, and treatment of celiac disease in the light of the latest literature.

This comprehensive review examines the diverse causes and management of chronic diarrhea (CD) in children. Celiac disease, a leading global cause, is often underdiagnosed and mismanaged, despite its straightforward gluten-free dietary treatment. The presentation is now frequently non-classical, and while diagnosis traditionally relies on serology and endoscopy, a non-biopsy approach is possible in select cases. Emerging pharmacological aids aim to improve dietary compliance.

Inflammatory bowel disease (IBD), another immune-mediated condition with rising incidence, requires differentiation from chronic infections like intestinal tuberculosis. Its management is now highly standardized, utilizing advanced classification and treatment algorithms centered on immunosuppressive therapies, including novel biologics. A multidisciplinary team approach is ideal for achieving sustained remission and endoscopic healing.

Cow's milk protein allergy, a common and treatable cause, underscores the need for clinical acumen due to a lack of definitive diagnostic tests. Careful history and examination are crucial, as is the judicious use of elimination diets to avoid nutritional compromise, with rechallenges to confirm the diagnosis.

Functional diarrhea, a disorder of gut-brain interaction, is increasingly recognized across age groups. Its pathophysiology and optimal treatment remain unclear, necessitating differentiation from more serious conditions and further research into its mechanisms.

Beyond these, the role of diet is complex. Advances in understanding congenital diarrheas and enteropathies (CODEs)—rare genetic disorders like microvillus inclusion disease and congenital chloride diarrhea—highlight the critical need for early diagnosis and specific dietary or nutritional support, sometimes requiring intestinal transplantation. While diet therapies are valuable in many chronic diseases, the review cautions against the blanket use of exclusion diets due to risks of nutritional deficiencies and maladaptive eating.

Other challenging causes of CD include immunodeficiencies, intestinal lymphangiectasia, secretory tumors, endocrinopathies, and increasingly recognized

entities like eosinophilic gastrointestinal diseases and drug-induced diarrhea. Early recognition is vital as these conditions can be severe and life-threatening.

In summary, CD arises from a vast spectrum of conditions, from congenital to immune-mediated. A structured diagnostic approach is essential, prioritizing early recognition and tailored therapy, especially for life-threatening disorders. Nutritional optimization is a universal cornerstone of management. For complex or unresolved cases, referral to expert centers for advanced investigation—including histopathology and genetics—is indicated. Future progress depends on enhancing our understanding of pathophysiology, improving diagnostic timeliness, and developing more targeted treatments.

REFERENCES:

1. ARTIQOV, I., & ABDULLAYEVA, D. (2025). CHICKENPOX: AMONG YOUNG CHILDREN IN KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, *5*(3), 678-683.
2. ARTIQOV, I., & ABDULLAYEVA, D. (2025). THE SPREAD OF DIARRHEAL DISEASES IN THE KHOREZM REGION. *Multidisciplinary Journal of Science and Technology*, *5*(3), 672-677.
3. SH, Y. S., YOQUBOV, Q., & NURLLAYEV, R. (2025). FEATURES OF THE COURSE OF THE HERPES TYPE 4 VIRUS IN CHILDREN. *Multidisciplinary Journal of Science and Technology*, *5*(3), 397-402.
4. NURLLAYEV, R., SH, Y. S., & YOQUBOV, Q. (2025). PECULIARITIES OF THE ETIOLOGICAL STRUCTURE OF ACUTE DIARRHEAL DISEASES IN THE CONDITIONS OF THE SOUTHERN ARAL REGION. *Multidisciplinary Journal of Science and Technology*, *5*(3), 403-408.
5. Артиков, И. А., Отажанов, Ш. З., & Садуллаев, С. Э. (2025). ПАТОМОРФОЛОГИЧЕСКИЕ АСПЕКТЫ ДЕТСКОГО ЛИМФОБЛАСТНОГО ЛЕЙКОЗА. *Multidisciplinary Journal of Science and Technology*, *5*(6), 257-264.
6. Kadamovna, A. D., Rustombekovich, N. R., Zarifboyevich, O. S., & Ernazarovich, S. S. (2025). COMBINATIONS OF HEPATITIS B WITH PULMONARY TUBERCULOSIS. *Multidisciplinary Journal of Science and Technology*, *5*(5), 60-65.
7. Rustombekovich, N. R., Zarifboyevich, O. S., Kadamovna, A. D., & Ernazarovich, S. S. (2025). THE STATE OF THE ANTIOXIDANT DEFENSE SYSTEM IN CHRONIC HEPATITIS C. *Multidisciplinary Journal of Science and Technology*, *5*(5), 79-84.

8. Ernazarovich, S. S., Zarifboyevich, O. S., Rustombekovich, N. R., & Kadamovna, A. D. (2025). DYNAMICS OF THE COVID-19 PANDEMIC AND ITS CLINICAL CONSEQUENCES. *Multidisciplinary Journal of Science and Technology*, *5*(5), 85-90.

9. Аскарова, Р. И., & Отажонов, Ш. З. (2020). ТУБЕРКУЛЕЗ НА ФОНЕ СОПУТСТВУЮЩЕЙ ПАТОЛОГИИ. *European Science*, (3), 106-108.

10. Аскарова, Р. И., Атажанов, Ш. З., & Маткурбанов, Х. И. (2019). АНАЛИЗ ПЕРВИЧНЫХ ФОРМ ТУБЕРКУЛЕЗА У ДЕТЕЙ, ПРОЖИВАЮЩИХ В ХОРЕЗМСКОЙ ОБЛАСТИ. *Наука, техника и образование*, (9), 64-68.

11. Ibraximova, H. R., Artiqov, I. A., & Otajanov Sh, Z. (2025). HELMINTH INFECTIONS: CLASSIFICATION, DEVELOPMENTAL CONDITIONS, AND CLINICAL MANIFESTATIONS. *Multidisciplinary Journal of Science and Technology*, *5*(6), 1241-1245.

12. Юсупов, Ш. Р., Отажонов, Ш. З., Артиков, И. А., & Ибодуллаева, С. С. (2025). МИКРОБИОЛОГИЧЕСКАЯ СТРУКТУРА ОСТРЫХ ДИАРЕЙНЫХ ЗАБОЛЕВАНИЙ В ЮЖНОМ ПРИАРАЛЬЕ: РЕЗУЛЬТАТЫ ЭПИДЕМИОЛОГИЧЕСКОГО МОНИТОРИНГА. *Multidisciplinary Journal of Science and Technology*, *5*(6), 237-242.

13. Urinovna, M. O., Kadamovna, A. D., Zarifboyevich, O. S., & Axmedjonovich, A. I. (2025). PUBLIC HEALTH AND EPIDEMIOLOGICAL INSIGHTS INTO THE COVID-19 PANDEMIC. *Multidisciplinary Journal of Science and Technology*, *5*(6), 243-248.

14. Khudaykulova, G. K., & Muminova, M. T. (2025, January). IMMUNOLOGICAL CHANGES IN HIV-INFECTED CHILDREN WITH VIRAL DIARRHEA. In *CONFERENCE ON THE ROLE AND IMPORTANCE OF SCIENCE IN THE MODERN WORLD* (Vol. 2, No. 1, pp. 149-150).

15. Otajanov, S. Z. (2025, January). CYTOKINE LEVELS IN HIV-INFECTED CHILDREN WITH VIRAL DIARRHEA. In *CONFERENCE ON THE ROLE AND IMPORTANCE OF SCIENCE IN THE MODERN WORLD* (Vol. 2, No. 1, pp. 148-148).

16. Худайкулова, Г., Муминова, М., & Отажанов, Ш. (2021). АНАЛИЗ ЭТИОЛОГИЧЕСКОЙ СТРУКТУРЫ ВИРУСНЫХ ДИАРЕЙ У ВИЧ-ИНФИЦИРОВАННЫХ ДЕТЕЙ. *Журнал кардиореспираторных исследований*, *2*(3), 31-34.

17. Машарипова Ш. АНТИОКСИДАНТНАЯ АКТИВНОСТЬ СЫВОРОТКИ КРОВИ И МАРКЕРЫ СТАТУСА ЖЕЛЕЗИ У БОЛЬНЫХ ХРОНИЧЕСКИМ ВИРУСНЫМ ГЕПАТИТОМ С.

18. Машарипова Ш., Машарипов С. Заболевание печени у больных с ишемической болезнью сердца среди хорезмского региона : дис. – Cardiorespiratory Research, 2021.

19. Машарипов С., Машарипова Ш. Изучение аминокислотного состава фиброина по слоям волокна шелка. – 2021.

20. Машарипов С., Машарипова Ш. Аминокислотный состав фиброина на слоях шелка. – 2021.

21. Хударгенова Д. Р. и др. ЦЕЛЕСООБРАЗНОСТЬ ОТБОРА ЖИВОТНЫХ-ПРОДУЦЕНТОВ ПРИ ПОЛУЧЕНИИ ГИПЕРИММУННЫХ СЫВОРОТОК, ПРИМЕНЯЕМЫХ В СУДЕБНО-МЕДИЦИНСКИХ ЛАБОРАТОРИЯХ. – 2023.

22. Masharipov S., Sh M. DEFINITION OF ETIOLOGICAL DOMINANT STRUCTURES OF NOSOCOMIAL PNEUMONIA. – 2024.

23. Sadullayev, S. E., Artikova, D. O., & Sadullayeva, M. R. (2026, January). STRENGTHENING CLINICAL REASONING IN INFECTIOUS DISEASES. In *Scottish International Conference on Multidisciplinary Research and Innovation–SICMRI 2025* (Vol. 3, No. 1, pp. 19-21).

24. Sadullayev, S. E., Ibragimov, S. J., & Bobojonov, Y. B. (2026, January). IMPROVING CLINICAL PREPAREDNESS AND FIRST AID RESPONSE IN EMERGENCY INFECTIOUS DISEASE SITUATIONS AMONG HEALTHCARE STUDENTS AND PROFESSIONALS. In *International Conference on Artificial Intelligence and Applications (ICAIA)* (Vol. 1, No. 2, pp. 10-13).

25. Jaloladdin o‘g‘li, M. M., & Ernazarovich, S. S. (2025). COMORBID INFECTIONS IN YOUNG CHILDREN: CLINICAL FEATURES AND ANALYSIS OF OBSERVATIONS. *Multidisciplinary Journal of Science and Technology*, *5*(4), 362-366.

26. Машарипова S., & Машарипов S. . (2024). Распространение ветряной оспы и ее профилактика в Узбекистане. *Общество и инновации*, *5*(9/S), 125–130. https://doi.org/10.47689/2181-1415-vol5-iss9/S-pp125-130

27. PROVIDING MEDICAL CARE TO PATIENTS WITH INFECTIOUS DISEASES. (2025). *Multidisciplinary Journal of Science and Technology*, *5*(5), 72-78. https://mjstjournal.com/index.php/mjst/article/view/3371

28. EPIDEMIOLOGY OF EXANTHEMIC DISEASES AMONG THE POPULATION OF KHOREZM. (2025). *Multidisciplinary Journal of Science and Technology*, *5*(5), 66-71. https://mjstjournal.com/index.php/mjst/article/view/3370

29. КЛИНИЧЕСКИЕ И ИММУНОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ИНФЕКЦИОННОГО МОНОНУКЛЕОЗА У ДЕТЕЙ. (2025). *Multidisciplinary*

Journal of Science and Technology, *5*(6), 249-256. https://www.mjstjournal.com/index.php/mjst/article/view/3933

30. Masharipova , S., Karimova, U., & Oltiyeva, H. (2025). RISK FACTORS AND METHODS OF PREVENTION OF NOSOCOMIAL INFECTION. *Общественные науки в современном мире: теоретические и практические исследования*, *4*(2), 67–70. извлечено от https://inlibrary.uz/index.php/zdif/article/view/66205

31. OPPORTUNISTIC INFECTIONS IN THE CONTEXT OF AIDS: A CLINICAL CASE. (2025). *Web of Teachers: Inderscience Research* , *3*(3), 140-144. https://webofjournals.com/index.php/1/article/view/3571

32. FEATURES OF THE CLINICAL COURSE OF CHICKENPOX IN ADULTS IN THE KHOREZM REGION (UZBEKISTAN). (2025). *Web of Discoveries: Journal of Analysis and Inventions*, *3*(3), 48-52. https://webofjournals.com/index.php/3/article/view/3636

33. МАШАРИПОВА Ш. С. ОСОБЕННОСТИ ЭПИДЕМИЧЕСКОГО ПРОЦЕССА БРЮШНОГО ТИФА В ПРИАРАЛЬЕ //Развитие и актуальные вопросы современной науки. – 2018. – №. 1. – С. 127-131.

34. Машарипова Шохиста Сабировна МОРФОЛОГИЧЕСКОЕ СТРОЕНИЕ ЛЕГОЧНЫХ АРТЕРИЙ ПОД ВЛИЯНИЕМ САХАРНОГО ДИАБЕТА // JCRR. 2022. №1. URL: https://cyberleninka.ru/article/n/morfologicheskoe-stroenie-legochnyh-arteriy-pod-vliyaniem-saharnogo-diabeta (дата обращения: 13.01.2026).

35. Masharipova S. S., Ibrahimova H. R. Matyakubova OU MORPHOLOGICAL CHARACTERISTICS OF THE ARTERIES OF THE SMALL CIRCULATION OF THE CIRCULATION ON THE BACKGROUND OF EXPERIMENTAL DIABETES //THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY. – 2022. – С. 13.

36. Matyakubova O. U. et al. MEASLES DISEASE AMONG THE POPULATION //JOURNAL OF APPLIED MEDICAL SCIENCES. – 2024. – Т. 7. – №. 3. – С. 40-50.

37. Матякубова О., Машарипова S., & Машарипов S. (2024). Clinical symptoms and laboratory features in the course of pneumonia in children according to the Khorezm region . *Современник аспекти паразитологии и актуальные проблемы кишечных инфекций*, *1*(1), 27. извлечено от https://inlibrary.uz/index.php/problems-intestinal-infections/article/view/32464

38. Матякубова О., Машарипова S., & Машарипов S. (2024). Detection of opportunistic infections in children with hiv infection. *Современник аспекти*

паразитологии и актуальные проблемы кишечных инфекций, *1*(1), 28. извлечено от https://inlibrary.uz/index.php/problems-intestinal-infections/article/view/32465

39. OPPORTUNISTIC INFECTIONS IN PATIENTS WITH DIABETES MELLITUS. (2025). *Western European Journal of Modern Experiments and Scientific Methods*, *3*(04), 43-47. https://westerneuropeanstudies.com/index.php/1/article/view/2331

40. Masharipovich M. S. Sabirovna MS TENIOZ KASALLIGI TASHXISLANGAN ALLERGIK FONGA EGA BOLALARNING IMMUN TIZIMINING XUSUSIYATLARI //ЖУРНАЛ ГЕПАТО-ГАСТРОЭНТЕРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ.–2022.–№. SI-2.

41. Artikov, I. A., Sadullaev, S. E., Ibrakhimova, H. R., & Abdullayeva, D. K. (2023). *RELEVANCE OF VIRAL HEPATITIS EPIDEMIOLOGY. IMRAS, 6 (7), 316–322.*

42. Sadullaev, S. E., Ibragimov, S. J., Bobojonov, Y. B., Yoqubov, Q. Y., Abdullayeva, D. K., & Khasanova, J. R. (2024). PREVALENCE OF DIARRHEAL DISEASES IN THE REPUBLIC OF UZBEKISTAN. *International Journal of Education, Social Science & Humanities*, *12*(3), 356-363.

43. Ibrakhimova, H. R., Matyakubova, O. U., Sadullaev, S. E., & Abdullayeva, D. K. (2023). *HELMINTISES IN CHILDREN AMONG THE POPULATION IN UZBEKISTAN. IMRAS, 6 (7), 323–327.*