

GASTROINTESTINAL MANIFESTATIONS AND EPIDEMIOLOGICAL FEATURES  
IN COVID-19 PATIENTS

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**Abstract**

This study explores the prevalence and characteristics of gastrointestinal (GI) symptoms in patients infected with COVID-19. A considerable proportion of patients experienced GI disturbances such as loss of appetite, nausea, diarrhea, and vomiting. Early recognition of these symptoms is crucial for timely diagnosis, effective management, and controlling the spread of the virus. The study also emphasizes the importance of comprehensive preventive strategies, including hygiene, household monitoring, and public awareness.

**Keywords**

COVID-19, gastrointestinal symptoms, epidemiology, prevention, SARS-CoV-2, vomiting, diarrhea, loss of appetite.

**Introduction**

The COVID-19 pandemic has posed a significant challenge to global public health. Although SARS-CoV-2 was initially classified as a respiratory pathogen, recent studies have revealed its effects on the gastrointestinal (GI) tract. The virus enters GI epithelial cells via ACE2 receptors, which can impair normal digestive function. Gastrointestinal symptoms may appear before respiratory signs in some cases, making them important for early detection and intervention.

**Methods**

This observational study included patients diagnosed with COVID-19 who presented to healthcare facilities with respiratory and/or gastrointestinal symptoms. Data on demographic characteristics, GI manifestations, and common COVID-19 symptoms were collected. The frequency of each symptom was calculated as a percentage of the total patient population.



## Results

**Table 1. Frequency of Gastrointestinal and Common Symptoms**

Symptom	Number of Patients	Prevalence (%)
Loss of appetite	20	66.7
Nausea	18	60.0
Diarrhea	12	40.0
Vomiting	10	33.3
Abdominal pain	9	30.0
Headache	15	50.0
Fever ( $\geq 38^{\circ}\text{C}$ )	22	73.3
Dry cough	24	80.0
Feeling feverish	19	63.3

The results indicate that gastrointestinal symptoms are frequent among COVID-19 patients. Loss of appetite and nausea were the most commonly reported GI manifestations. Concurrently, classic respiratory symptoms such as cough, fever, and headache were observed in the majority of patients.

## Discussion

The analysis confirms that gastrointestinal symptoms are common in COVID-19 and, in some cases, may precede respiratory manifestations. Early detection of these symptoms is essential for effective diagnosis and timely management. Transmission of SARS-CoV-2 occurs not only through respiratory droplets but also potentially via contaminated hands, utensils, and surfaces. Therefore, a comprehensive approach to prevention is critical.

## Preventive Strategies:

- 1. Hygiene and Social Distancing:** Regular handwashing, proper use of masks, and maintaining physical distance in public spaces reduce transmission.
- 2. Early Detection of GI Symptoms:** Patients presenting with diarrhea, nausea, or loss of appetite should be promptly tested using PCR or antigen assays.



3. **Household Transmission Prevention:** Monitoring all household members, symptom tracking, and strict adherence to isolation protocols minimize intra-family spread.

4. **Public Awareness:** Educating the public and healthcare professionals about GI manifestations enhances early case identification.

5. **Food Safety and Sanitation:** Adhering to sanitation standards in schools, childcare centers, and public catering facilities is crucial, considering possible fecal-oral transmission.

The average incubation period for COVID-19 is 5–6 days, and evidence indicates a high risk of household transmission. Gastrointestinal manifestations may appear as initial symptoms, necessitating attention in both clinical and epidemiological assessments.

## Conclusion

COVID-19 affects both the respiratory and gastrointestinal systems. Common GI symptoms include loss of appetite, nausea, diarrhea, and vomiting. Early recognition facilitates timely diagnosis and effective treatment. Integrated clinical and epidemiological strategies are essential to limit transmission and ensure optimal patient outcomes. Healthcare providers should consider GI manifestations as potential early indicators of COVID-19 to improve both preventive and therapeutic interventions.

## References

- 1.S., Masharipova S., et al. "A Method for Obtaining Precipitating Serums for the Detection of Human Seminal Fluid Used in the Study of Physical Evidence in Forensic Biological Laboratories." *World Bulletin of Management and Law*, vol. 19, 7 Feb. 2023, pp. 42-44.
2. Машарипова, Ш. С., Ибраимова, Х. Р., & Машарипов, С. М. (2023). Анализ эпидемиологических особенности диарейных заболеваний у детей южного приаралья. *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI*, 2(15), 884-887.
3. PATHOGENETIC PRINCIPLES OF ACUTE INFECTIOUS INTESTINAL INFECTIONS AND FEATURES OF CLINICAL COURSE AMONG CHILDREN OF DIFFERENT AGES. (2024). *Multidisciplinary Journal of Science and Technology*, 4(2), 357-365. <https://www.mjstjournal.com/index.php/mjst/article/view/877>
4. Машарипова, Ш. С., Ибраимова, Х. Р., & Машарипов, С. М. (2023). Анализ эпидемиологических особенности диарейных заболеваний у детей южного приаралья. *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI*, 2(15), 884-887.
5. Ибраимова Хаида Рустамовна, Нурллаев Руслон Рустамбекович, & Артиков Икром Ахмеджанович (2020). ВЫЯВЛЕНИЕ ТУБЕРКУЛЕЗА В ХОРЕЗМСКОЙ ОБЛАСТИ. *Наука и образование сегодня*, (6-1 (53)), 83-84. doi: 10.24411/2414-5718-2020-10602
6. PATHOGENETIC PRINCIPLES OF ACUTE INFECTIOUS INTESTINAL INFECTIONS AND FEATURES OF CLINICAL COURSE AMONG CHILDREN OF DIFFERENT AGES. (2024). *Multidisciplinary Journal of Science and*



*Technology*, 4(2), 357-365. <https://www.mjstjournal.com/index.php/mjst/article/view/877>

7. Аскарлова, Р. И., Юсупов, Ш. Р., & Ибраимова, Х. Р. (2020). Анализ причин развития туберкулеза у детей и подростков. *Главный редактор–ЖА РИЗАЕВ*, 27.
8. Ибраимова, Х. Р., Отажанов, Ш. З., & Матякубова, О. У. (2019). ТУБЕРКУЛЕЗНЫЙ МЕНИНГИТ У БОЛЬНЫХ, ПРОЖИВАЮЩИХ В ХОРЕЗМСКОЙ ОБЛАСТИ. In *INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS OF NATURAL SCIENCES AND MEDICINE* (pp. 96-104).
9. Ibraximova, H. R., Nurllayev, R. R., & Matyaqubova, O. U. (2023). KICHIK YOSHDAGI BOLALAR ORASIDA ICHAK PARAZITAR KASALLIKLARINING EPIDEMIOLOGIK XUSUSIYATLARI. *Новости образования: исследование в XXI веке*, 2(15), 109-114.
10. Artikov, I. A., Sadullaev, S. E., Ibrakhimova, H. R., & Abdullayeva, D. K. (2023). *RELEVANCE OF VIRAL HEPATITIS EPIDEMIOLOGY. IMRAS*, 6 (7), 316–322.
11. Artikov, I. A., Sadullaev, S. E., Ibrakhimova, H. R., & Abdullayeva, D. K. (2023). *RELEVANCE OF VIRAL HEPATITIS EPIDEMIOLOGY. IMRAS*, 6 (7), 316–322.
12. 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.
13. Ibrakhimova, H. R., Sh YS Artikov IA PARAZITAR KASALLIKLAR, and NATIJASIDA INSON ORGANIZMIDA KUZATILADAIGAN ALLERGIK HOLATLAR. "Новости образования: исследование в XXI веке.–2023." *T 2*: 97-102.
14. Ибраимова, Х. Р., Матякубова, О. У., Садуллаев, С. Э., & Абдуллаева, Д. К. (2023). ГЕЛЬМИНТЫ У ДЕТЕЙ СРЕДИ НАСЕЛЕНИЯ УЗБЕКИСТАНА. *IMRAS*, 6(7), 323-327.
15. Ибраимова, Х. Р. Машарипова Шохиста Собировна, Матякубова Айша Уриновна, & Артиков Икром Ахмеджанович (2023). *ИНФИЦИРОВАНИЕ БОЛЬНЫХ ТУБЕРКУЛЕЗОМ ОТ ЖИВОТНЫХ В НЕБЛАГОПОЛУЧНЫХ ПО ТУБЕРКУЛЕЗУ ХОЗЯЙСТВАХ. Проблемы современной науки и образования*, (7 (185)), 48-53.
16. Ҳамида Рустамовна Ибраимова (2022). ПАРАЗИТАР КАСАЛЛИКЛАР ТАШҲИСЛАНГАН ТУРЛИ ЁШДАГИ ОДАМЛАРДА ИММУН СТАТУСИГА ТАВСИФ. *Academic research in educational sciences*, 3 (4), 812-819. doi: 10.24412/2181-1385-2022-4-812-819
17. CLINICAL FEATURES OF ESCHERICHIOSIS IN CHILDREN. (2025). *Multidisciplinary Journal of Science and Technology*, 5(6), 220-224. <https://mjstjournal.com/index.php/mjst/article/view/3928>



18. Игамова, М. А., and А. Р. Облокулов. "Иброхимова ХР (2023)." *Тениаринхоз таиҳисланган турли ёшдаги беморларда иммун ва цитокин статусига тавсифи. Тиббиётда янги кун-2023.-5 (55)-P: 613-618.*
19. Sh, Yusupov Sh, and H. R. Ibrakhimova. "IMMUNOLOGICAL CHARACTERISTICS OF PATIENTS WHOSE BODY IS INFECTED WITH CATTLE SOLITAIRE." *Новости образования: исследование в XXI веке 2.15 (2023): 120-124.*
20. Oblokulov, A., Kholov, U., Oblokulova, Z., & Ibrakhimova, X. (2019). Clinical and laboratory characteristics of giardiasis in adults. *New day in medicine. Scientific and practical journal, 1(1).*
21. Ибрахимова Хамида Рустамовна, Нурллаев Руслон Рустамбекович, & Артиков Икром Ахмеджанович (2019). Влияние паразитарных болезней на особенности развития туберкулеза у детей, проживающих в Хорезмской области. *Наука, техника и образование, (9 (62)), 68-72.*
22. Ibraximova , H., Mo'minov , I., & Niyazmetov , T. (2025). OVQATLANISH VA IMMUNITET. *Journal of Science-Innovative Research in Uzbekistan, 3(2), 134–138.* Retrieved from <https://inlibrary.uz/index.php/journal-science-innovative/article/view/65822>
23. Rustamovna, Ibrakhimova H. "Degree of Clinical Symptoms in Children with Parasitic Diseases." *Galaxy International Interdisciplinary Research Journal, vol. 10, no. 10, 13 Oct. 2022, pp. 273-277.*
24. BASICS OF PREVENTING PARASITIC INFECTIONS AMONG CHILDREN. (2025). *Multidisciplinary Journal of Science and Technology, 5(2), 306-310.* <https://www.mjstjournal.com/index.php/mjst/article/view/2630>
25. Хамида Рустамовна Ибрахимова (2022). ПАРАЗИТАР КАСАЛЛИКЛАР ТАШҲИСЛАНГАН ТУРЛИ ЁШДАГИ ОДАМЛАРДА ИММУН СТАТУСИГА ТАВСИФ. *Academic research in educational sciences, 3 (4), 812-819.* doi: 10.24412/2181-1

