

Despite a declining incidence, Belarus's trajectory remains challenged by its high MDR-TB burden and a significant incidence-notification gap. To align with the WHO 'End TB' goals, a strategic pivot from generalised screening and lengthy hospitalisation towards a targeted, cost-effective model is essential. This shift must prioritise rapid molecular diagnostics for high-risk groups and address the underlying socioeconomic drivers, particularly in eastern regions like Gomel, to effectively control transmission and overcome the drug-resistant crisis.

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**Paladugu Netra Nandhini**

*Scientific supervisor: Ph.D., Associate Professor T. A. Petrovskaya*

*Educational institution  
“Gomel State Medical University”  
Gomel, Republic of Belarus*

## PREVALENCE OF CHOLERA IN INDIA

### ***Introduction***

Cholera, a persistent public health concern in India, is caused by *Vibrio cholerae*, a gram-negative bacterium [1]. Despite water supply management, sanitation reforms, and vaccination efforts, recurrent outbreaks occur in densely populated or flood-prone areas. Factors like inadequate sewage treatment, poor hand hygiene, open defecation, and unchlorinated municipal water systems contribute to transmission. The Ganges delta region, historically a reservoir of *V. cholerae* strains, continues to act as a reservoir. Despite improved treatment, the persistence of outbreaks underscores the need for revitalized public health interventions [2].

## ***Goal***

Cholera prevalence research in India aims to evaluate infection extent, identify high-risk areas, track trends, and inform prevention strategies through sanitation, vaccination, and health education.

## ***Material and methods of research***

Research data were gathered from various sources including WHO cholera reports, ECDC surveillance summaries, NCDC bulletins, peer-reviewed journals, and genomic studies of *V. cholerae* in India's eastern coastal regions, covering January 2024 to April 2025. Two primary methods were employed: population-based surveillance involving analysis of data from sentinel hospitals and outbreak investigations where field data on case definitions, attack rates, and environmental factors were reviewed.

## ***The results of the research and their discussion***

India faces a significant cholera burden, with 11,730 confirmed cases and 58 deaths reported as of April 2025, the highest in South and Southeast Asia. Key affected regions include Odisha, West Bengal, Gujarat, and Maharashtra, specifically coastal districts like Ganjam and Kendrapara in Odisha, which accounted for over 40% of cases. Seasonal peaks occurred following post-monsoon flooding, with confirmed cases rising by 22% in 2024 compared to 2023. Most outbreaks are in rural areas with poor water infrastructure, but peri-urban slums are also affected. Kolkata's surveillance indicates an incidence rate of 2.2 cases per 1,000 person-years, suggesting significant underreporting. Genomic studies in Odisha identified *V. cholerae* 01 Ogawa strains linked to local transmission [3] in many developing nations such as India, cholera disease is endemic. The surveillance system in India does not adequately capture the actual number of cases. As a result, it is important to utilize limited public health resources correctly in India and other developing countries more effectively to reach vulnerable communities. In this study, we analyze how studies make sense of cholera transmission and spread in India from 1996 to 2015. Furthermore, we analyze how a more sensitive surveillance system can contribute to cholera eradication by giving rise to outbreak preparedness.,""container-title":"The Journal of Infectious Diseases",""DOI":"10.1093/infdis/jiab436",""ISSN":"1537-6613",""issue":"12 Suppl 2",""journalAbbreviation":"J Infect Dis",""language":"eng",""note":"PMID: 34550374\nPMCID: PMC8687089",""page":"S710-S716",""source":"PubMed",""title":"Spread and Endemicity of Cholera in India: Factors Beyond the Numbers",""title-short":"Spread and Endemicity of Cholera in India",""volume":"224",""author": [{"family":"Saha", "given": "Gautam Kumar"}, {"family": "Ganguly", "given": "Nirmal Kumar"}], "issued": {"date-parts": [[2021, 12, 20]]}], "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} . Children under 15 make up nearly half of reported cases, revealing their vulnerability, while improved management has lowered mortality despite ongoing high case-fatality rates in remote areas [2].

The persistence of cholera in India underscores the intricate interplay between infrastructure, environment, and governance. Initiatives like the Swachh Bharat and Jal Jeevan Mission have enhanced sanitation and piped water access, yet significant urban-rural disparities persist. Natural disasters, such as floods and cyclones, exacerbate water network damage, leading to cross-contamination. Underreporting of cholera is a significant limitation, driven by incomplete laboratory confirmations and fears of economic repercussions, necessitating better integration in India's Integrated Disease Surveillance Programme. Socio-economic factors, including poverty, low literacy rates, and inadequate governance, are strongly correlated with cholera incidence, indicating that combating cholera requires not only medical but also developmental efforts, focusing on infrastructure, waste management, and public education.

Vaccination, particularly with oral cholera vaccines like Shanchol™, has shown effectiveness in high-incidence zones, yet less than 10% of high-risk populations are vaccinated. Water safety measures include routine chlorination and household treatment, alongside essential hygiene education. Sanitation efforts focus on expanding community toilets and ensuring safe sewage disposal. Rapid response teams exist but require improved deployment and coordination. Public education on handwashing, food safety, and usage of oral rehydration solutions can lower diarrheal illness fatality rates. Continuous genomic surveillance of *V. cholerae* is crucial for monitoring resistance trends [4]Rep-PCR and ribotyping.\nMETHODS: Fifty representative isolates of *V. cholerae* from outbreak as well as sporadic cases were subjected to molecular typing by PFGE, 173 isolates (163 clinical and 10 environmental.

### ***Conclusion***

Cholera remains an endemic and re-emerging disease in India, highlighted by annual outbreaks during monsoon seasons that expose weaknesses in water and sanitation systems. Despite a low case fatality rate, increasing case numbers and new bacterial strains pose significant risks. To combat this, India should focus on enhancing real-time surveillance and laboratory diagnostics, expanding oral cholera vaccination for at-risk populations, ensuring a safe water supply through effective chlorination and infrastructure improvement, and promoting intersectoral collaboration across health and sanitation sectors. Eliminating cholera will require a comprehensive, long-term approach that includes disease surveillance, infrastructure enhancement, and community engagement to reduce this public health threat.

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**P. D. T. Perera**

*Scientific Supervisor: Assistant Professor S. K. Pashkevich*

*Educational institution  
“Gomel State Medical University”  
Gomel, Republic of Belarus*

### **POST COVID 19 COMPLICATIONS IN SRILANKA PATIENTS**

#### ***Introduction***

The COVID-19 pandemic, caused by the SARS-CoV-2 virus, has become one of the most far-reaching health crises in modern history. Since it first appeared in late 2019, the virus has affected millions of people across the globe, bringing about not only severe health challenges but also major social and economic disruptions. While the immediate or “acute” phase of COVID-19 has been widely studied and managed, researchers and healthcare professionals are now increasingly concerned about what happens after recovery. Many people continue to experience lingering health problems even weeks or months after testing negative. These