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.

LITERATURE

1. Lee, J. H., [и др.]. Classification of hybrid and altered Vibrio cholerae strains by CTX prophage and RS1 element structure / J. H. Lee [et al.] // The Journal of Microbiology. – 2009. – Vol. 47, № 6. – P. 783–788.

2. Subedee, K. C., [et al]. Epidemiological investigation of a cholera outbreak in Nepal–India border communities: Public health implications / K. C. Subedee [et al.] // IJID Regions. – 2025. – Vol. 14. – P. 100489.

3. Saha, G. K., Ganguly, N. K. Spread and Endemicity of Cholera in India: Factors Beyond the Numbers / G. K. Saha, N. K. Ganguly // The Journal of Infectious Diseases. – 2021. – Vol. 224, № 12 suppl 2. – P. S710–S716.

4. Taneja, N., [и др.]. Molecular epidemiology of Vibrio cholerae causing outbreaks & sporadic cholera in northern India / N. Taneja [et al.] // The Indian Journal of Medical Research. – 2012. – Vol. 136, № 4. – P. 656–663.

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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

ongoing or newly emerging symptoms – often referred to as post COVID-19 complications or Long COVID – have become an important and rapidly growing area of medical research [1].

Post COVID-19 complications can affect almost every part of the body. They commonly involve the lungs, heart, brain, kidneys, and muscles, among other systems. People recovering from COVID-19 often report symptoms such as tiredness, shortness of breath, chest pain, difficulty concentrating, sleep problems, and anxiety or depression. The reasons behind these lasting effects are complex and may include long-term inflammation, immune system imbalances, damage to blood vessels, and possibly the continued presence of the virus in some form. Understanding how and why these complications occur is crucial for developing better ways to treat and support patients in the months following infection [2].

In Sri Lanka, the issue of post COVID-19 complications has particular importance. The country faced several waves of infection, each with different levels of severity and healthcare challenges. Despite strong vaccination campaigns and effective public health measures, many Sri Lankans who recovered from COVID-19 continue to struggle with ongoing health issues. These complications not only affect individuals and their quality of life but also place additional pressure on the already burdened healthcare system. Yet, local data on how common these complications are, what symptoms are most frequent, and which groups are most affected remain limited [3].

Studying post COVID-19 complications in the Sri Lankan population is important for several reasons. Factors such as genetics, existing health conditions, access to medical care, and economic circumstances can all influence how people experience long-term effects of the virus. By exploring these aspects locally, researchers can provide valuable information to help shape national healthcare policies and create targeted rehabilitation programs for those recovering from COVID-19. The findings can also add a much-needed South Asian perspective to the growing international understanding of Long COVID [4].

This study, therefore, aims to explore the range, frequency, and contributing factors of post COVID-19 complications among Sri Lankan patients. By identifying common symptoms and related risk factors, the research hopes to fill existing knowledge gaps and support the creation of evidence-based clinical guidelines for long-term care. Ultimately, a clearer understanding of these complications will not only improve the lives of patients but also strengthen Sri Lanka's healthcare system in preparing for future public health challenges [5].

Goal

The goal of this article is to assess Post COVID-19 Complications in Sri Lankan Patients through a survey-based study.

Material and methods of research

This study used a cross-sectional survey conducted among the Sri Lankan population to assess Post COVID-19 Complications in Sri Lankan Patients using an online questionnaire. A total of 376 responses were collected from diverse demographic groups and analyzed quantitatively to identify patterns in different types of complications after Covid 19. Data processing and statistical analysis were performed using Microsoft Office Excel 2013.

The results of the research and their discussion

According to the Figure 1 below 27.5% of responses shows Anxiousness or depression after your COVID-19 illness but 72.5% of responses does not shows Anxiousness or depression after your COVID-19 illness.

According to the Figure 2 below 27.5% of responses shows Hair loss after recovering from COVID-19 but 72.5% of responses does not shows Hair loss after recovering from COVID-19.

According to Figure 3 below 69.41% of responses shows they never had headaches after COVID 19 illness, 26.33 % of responses shows that they sometimes had headaches after COVID 19 illness, 4.26 % of responses shows that they often had headaches after recovery after COVID 19 illness.

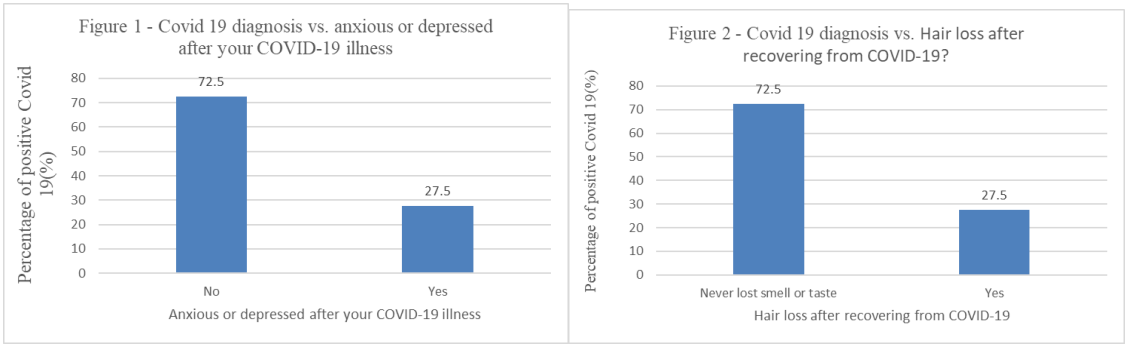

Figure 3 – Covid 19 diagnosis vs. Headaches recovery percentage

Tested Positive	Headaches After Recovery	Percentage (%)
Yes, confirmed by PCR/Antigen test	Never	69.41
Yes, confirmed by PCR/Antigen test	Sometimes	26.33
Yes, confirmed by PCR/Antigen test	Yes, often	4.26

Conclusion

The results of this study show that Sri Lankan patients experience a range of post-COVID-19 complications, both physical and psychological. About 27.5% of respondents reported feelings of anxiousness or depression after their illness, while the majority (72.5%) did not experience such symptoms. This suggests that although most people recover emotionally, a considerable number continue to face mental health challenges that should not be overlooked.

Similarly, 27.5% of participants experienced hair loss after recovering from COVID-19, whereas 72.5% did not. This indicates that hair loss, though less common, still affects a noticeable portion of patients and can impact their overall well-being.

When it comes to headaches, 69.41% of respondents said they never experienced them after recovery, 26.33% said they sometimes did, and 4.26% reported frequent headaches. These findings show that while headaches are not widespread, they remain a persistent issue for some individuals.

In summary, post-COVID-19 complications among Sri Lankan patients mainly involve emotional effects such as anxiety and depression, along with mild physical symptoms like hair loss and headaches. These outcomes highlight the need for continuous follow-up care and better support for both the mental and physical health of patients recovering from COVID-19.

LITERATURE

1. Jayasekera, M. M. P. T., De Silva, N. L., Edirisinghe, E. M. D. T., Samarawickrama, T., Sirimanna, S. W. D. R. C., Govindapala, B. G. D. S., Senanayake, G., Wickramaratne, D. L. N., Hettigoda, K., Gunawaradana, U. D. I. B., Wijayananda, K. D. P. B., Wijesinghe, R. A. N. K. A prospective cohort study on post COVID syndrome from a tertiary care centre in Sri Lanka / M. M. P. T. Jayasekera [et al.] // Scientific Reports. – 2023. – Vol. 13. – Art. 15569.

2. Abeysuriya, V., Gunasekara, A. S., Jayawardena, R., De Silva, N., Karunaratne, U. Postdischarge outcomes of COVID-19 patients from South Asia / Sri Lanka / V. Abeysuriya [et al.] // PLOS ONE / PMC. – 2022.

3. O'Mahoney, L. L., Hanna, M. E., Nasir, S., [et al.]. The prevalence and long-term health effects of Long Covid among hospitalised and non-hospitalised populations: a systematic review and meta-analysis / L. L. O'Mahoney [et al.] // eClinicalMedicine. – 2023. – Vol. 55. – Art. 101762.

4. Natarajan, A., Jacob, J., Palaniappan, S., [et al.]. A systematic review and meta-analysis of long COVID symptoms / A. Natarajan [et al.] // Systematic Reviews. – 2023. – Vol. 12. – Art. 88.

5. Akbarialiabad, H., Taghrir, M. H., Abdollahi, A., [et al.]. Long COVID: a comprehensive systematic scoping review / H. Akbarialiabad [et al.] // Journal of Translational Medicine / BMC / PMC. – 2021.

6. Google Form [Electronic resource in the bibliography]. – URL: https://docs.google.com/spreadsheets/d/1freBb4Rny8DWJFLGVrBzrBUMiTORqWzi6dupwP4MaAA/edit?resourcekey=&gid=1088973406#gid=1088973406 (date of access: 06.11.2025).

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EPIDEMIOLOGICAL TRENDS AND STRATEGIC RESPONSES TO DENGUE, A NOTIFIABLE DISEASE IN SRI LANKA

Introduction

Dengue fever is an arthropod-borne viral infection, caused by any 4 serotypes (DENV-1 to DENV-4) of single stranded RNA virus from genus flavivirus. It is common in subtropical and tropical areas of the world and transmitted to humans by Aedes mosquitoes, mainly by female vectors including Aedes albopictus aegypti and A aegypti. In infected humans, virus circulates in the blood for 2 to 7 days. During this period, Aedes mosquito receive the virus when fed on humans [1]. In past few decades, the incidence of dengue fever has increased rapidly leading to an endemic in Asia, America, Australia and Africa. 75% of infected individuals are asymptomatic and other individuals range from having dengue fever to severe dengue hemorrhagic fever and shock. Incubation period is usually 4 to 7 days and lasting for 3 to 10 days with symptoms. Viremia (presence of virus in bloodstream) happens 24 to 48 hours before the onset of symptoms [2]. Dengue fever has 3 phases as febrile, critical and recovery stage. In febrile stage individuals experience high grade fever typically reaching 40 degrees, lasting from 2 to 7 days. Other symptoms include skin erythema, myalgia, arthralgia, sore throat, nausea and vomiting. During the critical phase temperature drops to 37.5 degrees to 38.5 degrees between 3 to 7 days. Before the critical phase, platelet count rapidly decrease, accompanied by increased levels of hemotocrit. If Leukopenia occurs 24 hours before the drop in platelet count, it's an emergency condition and left untreated in critical phase can lead to shock, disseminated intravascular coagulation, organ dysfunction or hemorrhage. The recovery phase causes the reabsorption of extravascular fluid in 2 to 3 days [1]. Diagnostic studies include culture, acute and convalescent serological testing, dengue antigen detection of non-structural protein 1 and PCR. Symptomatic treatment is carried out for dengue fever. Drugs like acetaminophen is used but NSAIDs (nonsteroidal anti-inflammatory drugs) like aspirin must be avoided due to risk of bleeding [2]. Dengue fever has annually over 100 million cases and 20 to 25,000 deaths leading to global epidemics in different regions, posing public health emergency [1]. In Sri Lanka, dengue currently has reached epidemic proportions, by reporting 23,000 cases nationwide as of 2025 and facing a public health crisis due to surge in dengue cases. The Ministry of Health of Sri Lanka is actively holding awareness programmes and campaigns to clean-up the places to avoid mosquito breeding sites [3].