



# Changing Clinical Manifestation of Respiratory Viral Infection in Children Post COVID-19 Pandemic

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*To the Editor:* Acute respiratory infections (ARI) in children are mainly caused by viruses [1]. ARI is the major cause of death in children in developing countries [2]. It has been observed that, post-COVID-19, there is change in clinical spectrum of viral ARI. We studied 75 hospitalised children (1 mo to 12 y) from January to March 2023 whose nasopharyngeal and/or oropharyngeal aspirates tested positive for viral PCR.

We observed that majority were infected with adenovirus (30.6%) followed by influenza A (24%) and influenza B (16%). The common age affected was 1 to 5 y (64%). The common presentations were fever with cough (92%), and respiratory distress (18.6%). Most children had pneumonia (78.6%). Pneumonia was diagnosed in all patients with influenza A. Among children with influenza B, 2.6% presented with shock and acute respiratory distress syndrome requiring mechanical ventilation and inotropes, however succumbed. Most cases (78.6%) had raised white blood cells (WBC) and C-reactive protein (CRP). All children infected with influenza were either partially or not vaccinated.

Pre-COVID-19 study by Huang et al. reports that influenza was frequently detected and adenovirus infection was common in the immunocompromised; post-COVID-19 we observed that adenovirus affected immunocompetent children [3].

Servellita et al. proposed that lockdown during the COVID-19 pandemic made children more susceptible to viral ARI causing a change in the clinical spectrum. Immunity in children is an adaptive immune response shaped in part by exposure to pathogens early in life. Once lockdown was called off, children were exposed to multiple viruses in a poorly trained immune system, causing severe disease [4].

We conclude that post-COVID-19 and the ensuing lockdown, adenoviral infection was common in immunocompetent children, causing high-grade fever of prolonged duration with a high inflammatory response mimicking bacterial infection. All children with influenza presented with pneumonia; influenza B also resulted in severe disease. Partial or no vaccination, which possibly increased the severity of influenza, is a matter of concern.

## Declarations

**Conflict of Interest** None.

## References

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