



Long COVID in Children up to 12 y of Age - A Retrospective Telephonic Survey

Ritesh Ranjan Sah¹ · Nabaneeta Dash¹ · Surjeet Kumar² · Lesa Dawman³ · Sanjay Verma¹

Received: 8 February 2023 / Accepted: 23 February 2023 / Published online: 16 March 2023
© The Author(s), under exclusive licence to Dr. K C Chaudhuri Foundation 2023

To the Editor: Long-COVID is a well described entity in adults, however, information is scarce in children; particularly from low-middle income countries [1]. We planned this retrospective telephonic survey to determine outcome of children hospitalized in a tertiary care hospital of North India with COVID-19 infection, in terms of persisting symptoms. From April 2020 - May 2021, 262 children (≤ 12 y-of-age) were diagnosed with acute COVID-19 infection in our hospital. Two-thirds (163) responded to telephonic calls made by us between July - October 2021. Three parents refused consent, hence 160 responses were recorded. A predesigned questionnaire suggested by Ministry of Health and Family Welfare, Government of India, was used for recording persisting symptoms [2].

The median age of children was 24 mo (IQR: 2, 84), and 102 (64%) were males. Three-fourths (120/160) had required hospitalization, and 37 (23%) died, mostly (89%) due to underlying disease. Three children (2.4%) had persistent symptoms following discharge. One child (10-mo-old) had fever for 3 mo which settled spontaneously. Another 8-mo-old boy was diagnosed with multisystem inflammatory syndrome in children (MIS-C), 1 mo after testing positive for COVID-19 infection and recovered without any complications. Lastly a 10-y-old girl diagnosed with MIS-C and acute COVID-19 infection had prolonged fatigue of 11 mo but without restriction of daily activities.

In summary, incidence of long-COVID in this telephonic survey was low compared to other studies [1, 3, 4]. Small sample size, exclusion of adolescents from study population, variation in follow-up period, cultural differences in study populations could be possible contributors to the low incidence and prevalence.

Population-based studies on long-COVID can give a better idea on prevalence. This information could help design appropriate provisions to protect children and young people. Data on long-COVID can influence vaccine policy for children. It can change the perspective of COVID-19 in children as being mild disease to one with potential to cause long-term chronic debilitating health issues.

Acknowledgements We thank Prof. Jayashree Muralidharan and the whole COVID-19 management committee of our hospital for their input and guidance.

Declarations

Conflict of Interest None.

References

1. Lopez-Leon S, Wegman-Ostrosky T, Del Ayuzo NC, et al. Long-COVID in children and adolescents: a systematic review and meta-analyses. *Sci Rep.* 2022;12:9950.
2. GOI MOHFW. Questionnaire for symptoms of long COVID suggested by MOHFW, GOI. Available at: <https://www.mohfw.gov.in/pdf/NationalComprehensiveGuidelinesforManagementofPostCovidSequelae.pdf> (mohfw.gov.in). Accessed on 8th Dec 2022.
3. Say D, Crawford N, McNab S, Wurzel D, Steer A, Tosif S. Post-acute COVID-19 outcomes in children with mild and asymptomatic disease. *Lancet Child Adolesc Health.* 2021;5:e22–3.
4. Sterky E, Olsson-Åkefeldt S, Hertting O, et al. Persistent symptoms in Swedish children after hospitalisation due to COVID-19. *Acta Paediatr.* 2021;110:2578–80.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Sanjay Verma
sanjay06verma@yahoo.com

¹ Division of Infectious Diseases, Department of Pediatrics, Advanced Pediatrics Center (APC), Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh 160011, India

² Emergency and Intensive Care Division, Department of Pediatrics, Advanced Pediatrics Center (APC), Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

³ Division of Nephrology, Department of Pediatrics, Advanced Pediatrics Center (APC), Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India