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Risk factors for post-COVID-19 condition in previously hospitalised children using the ISARIC Global follow-up protocol: a prospective cohort study

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Shareable abstract (@ERSpublications)

A quarter of children experienced persistent symptoms months after COVID-19 infection, with almost one in 10 experiencing multisystem involvement. Older age and allergic diseases were associated with higher risk of persistent symptoms at follow-up. https://bit.ly/3vqeEmZ

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Abstract

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Background The long-term sequelae of coronavirus disease 2019 (COVID-19) in children remain poorly characterised. This study aimed to assess long-term outcomes in children previously hospitalised with COVID-19 and associated risk factors.

Methods This is a prospective cohort study of children (⩽18 years old) admitted to hospital with confirmed COVID-19. Children admitted between 2 April 2020 and 26 August 2020 were included. Telephone interviews used the International Severe Acute Respiratory and Emerging Infection Consortium (ISARIC) COVID-19 Health and Wellbeing Follow-up Survey for Children. Persistent symptoms (>5 months) were further categorised by system(s) involved.

Results 518 out of 853 (61%) eligible children were available for the follow-up assessment and included in the study. Median (interquartile range (IQR)) age was 10.4 (3–15.2) years and 270 (52.1%) were girls. Median (IQR) follow-up since hospital discharge was 256 (223–271) days. At the time of the follow-up interview 126 (24.3%) participants reported persistent symptoms, among which fatigue (53, 10.7%), sleep disturbance (36, 6.9%) and sensory problems (29, 5.6%) were the most common. Multiple symptoms were experienced by 44 (8.4%) participants. Risk factors for persistent symptoms were: older age "6–11 years" (OR 2.74, 95% CI 1.37–5.75) and "12–18 years" (OR 2.68, 95% CI 1.41–5.4), and a history of allergic diseases (OR 1.67, 95% CI 1.04–2.67).

Conclusions A quarter of children experienced persistent symptoms months after hospitalisation with acute COVID-19 infection, with almost one in 10 experiencing multisystem involvement. Older age and allergic diseases were associated with higher risk of persistent symptoms at follow-up.