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Authors	Osmanov, Ismail M.;Spiridonova, Ekaterina;Bobkova, Polina;Gamirova, Aysylu;Shikhaleva, Anastasia;Andreeva, Margarita;Blyuss, Oleg;El-Taravi, Yasmin;DunnGalvin, Audrey;Comberiati, Pasquale;Peroni, Diego G.;Apfelbacher, Christian;Genuneit, Jon;Mazankova, Lyudmila;Miroshina, Alexandra;Chistyakova, Evgeniya;Samitova, Elmira;Borzakova, Svetlana;Bondarenko, Elena;Korsunskiy, Anatoliy A.;Konova, Irina;Wulf Hanson, Sarah;Carson, Gail;Sigfrid, Louise;Scott, Janet T.;Greenhawt, Matthew;Whittaker, Elizabeth A.;Garralda, Elena;Swann, Olivia V.;Buonsenso, Danilo;Nicholls, Dasha E.;Simpson, Frances;Jones, Christina;Semple, Malcolm G.;Warner, John O.;Vos, Theo;Olliaro, Piero;Munblit, Daniel
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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

Ismail M. Osmanov[1,2,29], Ekaterina Spiridonova[3,29], Polina Bobkova[3,29], Aysylu Gamirova[3,29], Anastasia Shikhaleva[3,29], Margarita Andreeva[3,29], Oleg Blyuss[3,4,29], Yasmin El-Taravi[3], Audrey DunnGalvin[3,5], Pasquale Comberiati[6], Diego G. Peroni[6], Christian Apfelbacher[7], Jon Genuneit[8], Lyudmila Mazankova[9], Alexandra Miroshina[1], Evgeniya Chistyakova[10], Elmira Samitova[1,9], Svetlana Borzakova[2,11], Elena Bondarenko[3], Anatoliy A. Korsunskiy[3], Irina Konova[1], Sarah Wulf Hanson[12], Gail Carson[13], Louise Sigfrid[13], Janet T. Scott[14], Matthew Greenhawt[15], Elizabeth A. Whittaker[16], Elena Garralda[17], Olivia V. Swann[18,19], Danilo Buonsenso[20,21,22], Dasha E. Nicholls[17], Frances Simpson[23], Christina Jones[24], Malcolm G. Semple[25,26], John O. Warner[27], Theo Vos[12], Piero Olliaro[13], Daniel Munblit[3,27,28,29] and the Sechenov StopCOVID Research Team[30]

[1]Z.A. Bashlyaeva Children's Municipal Clinical Hospital, Moscow, Russia. [2]Pirogov Russian National Research Medical University, Moscow, Russia. [3]Dept of Paediatrics and Paediatric Infectious Diseases, Institute of Child's Health, Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russia. [4]School of Physics, Astronomy and Mathematics, University of Hertfordshire, Hatfield, UK. [5]School of Applied Psychology, University College Cork, Cork City, Ireland. [6]Dept of Clinical and Experimental Medicine, Section of Pediatrics, University of Pisa, Pisa, Italy. [7]Institute of Social Medicine and Health Systems Research, Faculty of Medicine, Otto von Guericke University Magdeburg, Magdeburg, Germany. [8]Pediatric Epidemiology, Dept of Pediatrics, Medical Faculty, Leipzig University, Leipzig, Germany. [9]Russian Medical Academy of Continuous Professional Education of the Ministry of Healthcare of the Russian Federation, Moscow, Russia. [10]Dept of Paediatrics and Paediatric Rheumatology, Institute of Child's Health, Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russia. [11]Research Institute for Healthcare Organization and Medical Management of Moscow Healthcare Dept, Moscow, Russia. [12]Institute for Health Metrics and Evaluation, University of Washington, Seattle, WA, USA. [13]ISARIC Global Support Centre, Nuffield Dept of Medicine, University of Oxford, Oxford, UK. [14]MRC-University of Glasgow Centre for Virus Research, Glasgow, UK. [15]Dept of Pediatrics, Section of Allergy/Immunology, Children's Hospital Colorado, University of Colorado School of Medicine, Aurora, CO, USA. [16]Paediatric Infectious Diseases, Imperial College Healthcare NHS Trust, London, UK. [17]Division of Psychiatry, Imperial College London, London, UK. [18]Dept of Child Life and Health, University of Edinburgh, Edinburgh, UK. [19]Paediatric Infectious Diseases, Royal Hospital for Children, Glasgow, UK. [20]Dept of Woman and Child Health and Public Health, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy. [21]Dipartimento di Scienze Biotecnologiche di Base, Cliniche Intensivologiche e Perioperatorie, Università Cattolica del Sacro Cuore, Rome, Italy. [22]Center for Global Health Research and Studies, Università Cattolica del Sacro Cuore, Rome, Italy. [23]Coventry University, Coventry, UK. [24]School of Psychology, Faculty of Health and Medical Sciences, University of Surrey, Guildford, UK. [25]Health Protection Research Unit in Emerging and Zoonotic Infections, Institute of Infection, Veterinary and Ecological Sciences, Faculty of Health and Life Sciences, University of Liverpool, Liverpool, UK. [26]Dept of Respiratory Medicine, Alder Hey Children's Hospital, Liverpool, UK. [27]Inflammation, Repair and Development Section, National Heart and Lung Institute, Faculty of Medicine, Imperial College London, London, UK. [28]Research and Clinical Center for Neuropsychiatry, Moscow, Russia. [29]These authors contributed equally to this article. [30]A list of members of the Sechenov StopCOVID Research Team can be found in the Acknowledgements section.

Corresponding author: Daniel Munblit (daniel.munblit08@imperial.ac.uk)

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.