Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Low COVID-19 mortality in Spanish children

We thank Bhopal and colleagues for amending their recent letter,[1] which initially reported incorrect data for the number of COVID-19 deaths in children aged up to 19 years in Spain. The letter now reports 0·18 COVID-19 deaths per 100 000 in children aged 0–9 years (eight deaths) and 0·37 per 100 000 in children aged 10–19 years (18 deaths), up to Feb 10, 2021. We thought that readers of *The Lancet Child & Adolescent Health* might benefit from some clarity about how this situation arose and was rectified.

The primary source used by Bhopal and colleagues noted that the data were provisional and not consolidated.[2] In Spain, several clinical registries have been developed since the COVID-19 pandemic began, collecting data from more than 75 Spanish hospitals on the features and deaths of children with COVID-19.[3,4] These include the National Registry of COVID-19 in Spanish Children of the Spanish Paediatric Association (EPICO-AEP), the registry of children with SARS-CoV-2 infection admitted to Pediatric Intensive Care Units of the Spanish Society of Paediatric Intensive Care (SECIP), and the Hemato-Oncology Registry for COVID-19, among others.

We realised that the numbers of deaths described by Bhopal and colleagues were much higher than in the registries, in which ten deaths of children younger than 18 years were reported (appendix). After the publication of the letter by Bhopal and colleagues, Spanish researchers from the different registries reported this discordance to the Spanish regional and national agencies. Paediatricians and regional and national agencies coordinated to check the information regarding deaths with SARS-CoV-2 infection in children and young people. A programming error associated with the age of deceased patients was identified and resolved. Data from the National Network of Public Health Surveillance (RENAVE) have been verified and updated to March 24, 2021: these data report nine deaths in children aged 0–9 years and 17 deaths in children aged 10–19 years.[2] Therefore, mortality was 0·21 per 100 000 in children aged 0–9 years and 0·34 per 100 000 in children aged 10–19 years. In agreement with the registries, most of the children reported to have died from COVID-19 in RENAVE data had pre-existing serious comorbidities.

Some discrepancies between the clinical registries and RENAVE might still be found for several reasons. In Spain, the process of reporting is complex. 17 different autonomous regions report COVID-19 deaths and positive SARS-CoV-2 cases to RENAVE, and not all reports are updated at the same time. Also, patients with multi-inflammatory syndrome might not be considered to have COVID-19 if the RT-PCR test is negative.

This event highlights several lessons. First, preliminary or provisional surveillance data are to be used with caution or they could lead to inaccurate conclusions. As Bhopal and colleagues state, the differences between countries might be partly due to differences in reporting mechanisms, especially with such small absolute numbers. Head-to-head comparisons between countries based on inaccurate or incomplete information could lead to false assumptions, which could trigger measures that have negative consequences for children. Second, updated clinical registry data are useful to monitor the pandemic and improve the interpretation of epidemiological surveillance information. Third, mechanisms for rechecking abnormally high or low rates of cases or deaths can be useful, both for epidemiologists and for authors.

AT reports grants from Asociacion Española de Pediatra, Instituto de Salud Carlos III, Fundación para la Investigación Hospital 12 de Octubre, and Fundación para la Investigación Infanta Sofía. All other authors declare no competing interests. AT and MJM are members of the EPICO-AEP Working Group and part of the Translational Research Network in Paediatric Infectious Diseases (RITIP). AG-S contributes to the registry of children with SARS-CoV-2 infection admitted to Pediatric Intensive Care Units of the SECIP. We thank the parents and caregivers of deceased children who provided consent for recording their children's data in the clinical registries. We thank all paediatricians and researchers who contributed to this letter and to the registries, especially Rafael González-Cortés (Pediatric Intensive Care Unit, Hospital Universitario Gregorio Marañón, Madrid, Spain; registry of children with SARS-CoV-2 infection admitted to Pediatric Intensive Care Units of the SECIP); Cinta Moraleda (EPICO-AEP; Fundación de Investigación Biomédica Hospital 12 de Octubre. Instituto de Investigación 12 de Octubre [imas12], Madrid, Spain; RITIP; and Paediatric Infectious Diseases Unit, Department of Paediatrics, Hospital Universitario 12 de Octubre, Paediatric Research and Clinical Trials Unit [UPIC], Madrid, Spain); Cristina Calvo (Paediatrics, Infectious and Tropical Diseases Department, Hospital Universitario La Paz, Instituto de Investigación Hospital La Paz [IDIPaz], Madrid, Spain; RITIP); Fernando Simón, María José Sierra, and Pilar Aparicio (General Directorate of Public Health, Ministry of Health and Social Welfare, Madrid, Spain); and Pablo Velasco (Department of Hemato-oncology, Hospital Infantil Vall D'Hebron, Barcelona, Spain; Hemato-oncology Registry for COVID-19 of the Sociedad Española de Hematologia y Oncologia Pediátrica). We also thank all the members of the EPICO-AEP and the registry of children with SARS-CoV-2 infection admitted to Pediatric Intensive Care Units of the SECIP.

Alfredo Tagarro, Alberto García-Salido, Elena-Vanessa Martínez, Lorena Vega-Piris, María José Mellado
alfredotagarro@gmail.com

Paediatrics Department, Hospital Universitario Infanta Sofía, Paediatrics Research Group, Universidad Europea de Madrid, Madrid, Spain (AT); Fundación de Investigación Biomédica Hospital 12 de Octubre, Instituto de Investigación 12 de Octubre (imas12), Madrid 28041, Spain (AT); Fundación para la Investigación Biomédica Hospital Infanta Sofía y del Henares, Madrid, Spain (AT); Pediatric Intensive Care Unit, Hospital Infantil Universitario Niño Jesús, Madrid, Spain (AG-S); Coordination Center for Health Alerts and Emergencies, Ministry of Health and Social Welfare, CIBER in Epidemiology and Public Health (CIBERESP), Madrid, Spain (E-VM); National Centre of Epidemiology, Institute of Health Carlos III, Madrid, Spain (LV-P); Paediatrics, Infectious and Tropical Diseases Department, Hospital Universitario La Paz, Instituto Investigación Hospital La Paz (IDIPaz), Madrid, Spain (MJM)

1 Bhopal SS, Bagaria J, Olabi B, Bhopal R. Children and young people remain at low risk of COVID-19 mortality. *Lancet Child Adolesc Health* 2021; published online March 10. https://doi.org/10.1016/S2352-4642(21)00066-3.

2 Centro Nacional de Epidemiología. Incidencias acumuladas e indicadores de transmisibilidad. https://cnecovid.isciii.es/covid19/#documentación-y-datos (accessed March 28, 2021).

Published **Online**
April 14, 2021
https://doi.org/10.1016/S2352-4642(21)00125-5

This online publication has been corrected. The corrected version first appeared at thelancet.com/child-adolescent on April 22, 2021

See **Online** for appendix

3 Moraleda C, Serna-Pascual M, Soriano-Arandes A, et al. Multi-inflammatory syndrome in children related to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Spain. *Clin Infect Dis* 2020; published online July 25. https://doi.org/10.1093/cid/ciaa1042.

4 García-Salido A, de Carlos Vicente JC, Belda Hofheinz S, et al. Severe manifestations of SARS-CoV-2 in children and adolescents: from COVID-19 pneumonia to multisystem inflammatory syndrome: a multicentre study in pediatric intensive care units in Spain. *Crit Care* 2020; **24:** 666.