

COVID-19

LITERATURE REPOSITORY

Paediatric COVID-19 Mortality – A Brief Overview

Author(s)

Meghan Gunst and Adam Bartlett

Submission date

8th April 2020

Publication date

17th April 2020

Department, Hospital

Department of Immunology and Infectious Diseases, Sydney Children's Hospital, Randwick

Discussion

The most robust COVID-19 paediatric mortality data comes from China and the United States. The Chinese CDC released data up to 11 February 2020, that included 416 COVID-19 cases in children aged <10 years, in whom there were no deaths.¹ This report also included 549 adolescent (age 10-19 years) cases, but no mortality data was described. In another Chinese nationwide cohort of 2,143 paediatric patients reported to the Chinese CDC between 16 January and 8 February 2020 with either confirmed (n=731) or suspected (n=1,412) cases, one adolescent (age 14 years) had died (cause of death not reported).²

Data from Wuhan Children's Hospital, the only centre assigned by the central government for treating infected children less than 16 years of age in Wuhan, reported three intensive care admissions (all had comorbidities) and one death from 171 confirmed COVID-19 cases between January 28 and February 26 2020.³ The one death was in a 10-month old who had intussusception and multi-organ failure, that died 4 weeks into their hospitalisation. These confirmed cases were derived from a cohort of 1,391 children who were assessed due to having symptoms consistent with COVID-19 or were asymptomatic but had contact with someone confirmed or suspected to have COVID-19, and therefore a relatively representative population.

Data from the US CDC COVID-19 Response Team (released 6th April 2020), which included 2,572 confirmed cases among children aged <18 years between 12 February and 2 April 2020, reported three paediatric deaths.⁴ These deaths are still under investigation to confirm COVID-19 as the likely cause of death.



The Sydney
children's
Hospitals Network

care, advocacy, research, education

Conclusions

At the time of writing, there is limited paediatric mortality data outside of China and US. Media reports are emerging of deaths in children and adolescents with SARS-CoV-2, however a number of these cases remain under investigation for a certain cause of death. These media reports, from the UK (n=3), USA (n=3), and Europe (n=2), include two deaths in children less than 10 years of age and six adolescents aged 10-19 years.

References

1. Wu Z, McGoogan J. Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72 314 Cases From the Chinese Center for Disease Control and Prevention. *JAMA*, 2020;323(13):1239-1242. doi: 10.1001/jama/2020.2648.
2. Dong Y, Mo X, Hu Y, et al. Epidemiological characteristics of 2143 pediatric patients with 2019 coronavirus disease in China. *Pediatrics*, 2020; doi: 10.1542/peds.2020-0702.
3. Lu X, Zhang L, Du H, et al. SARS-CoV-2 Infection in Children. *N Engl J Med*, 2020; doi: 10.1056/NEJMc2005073.
4. CDC COVID-19 Response Team. Coronavirus Disease 2019 in Children – United States, February 12 – April 2, 2020. *MMWE Morb Mortal Wkly Rep*, epub: 6 April 2020. doi: <http://dx.doi.org/10.15585/mmwr.mm6914e4>



The Sydney
children's
Hospitals Network

care, advocacy, research, education