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### LETTER

# ACTA PÆDIATRICA

## WILEY

# Re: Case reports and systematic review suggest that children may experience similar long-term effects to adults after clinical COVID-19

### To the Editor

We read with interest the article by Jonas F. Ludvigsson published in *Acta Pediatrica*.<sup>1</sup> While it is amongst the first articles published on an interesting and timely topic, there are several issues with this case series that warrants further discussion and calls into the question the findings. Firstly, the author states that the clinical report is solely based on the reports from the parents of each of the five children described—what measures were taken to validate these reports by asking for copies of medical notes or through contact with the treating physicians? This is crucial in our view, as it is known that children (and their parents) with complex multifaceted symptoms without a clear somatic diagnosis tend to typically use a monocausal explanation for their ailments,<sup>2</sup> sometimes in stark contrast to the treating physician. Was any attempt made by the author to perform any kind physical examination on any of the children in the case series?

Furthermore, the report states that none of the children had tested positive using PCR for SARS-CoV-2 when they initially fell ill, in line with the policy to only test severe cases in Sweden at that time. It is then claimed that four of the children had tested negative for antibodies directed at SARS-COV-2 using routine serology methods, how long after their initial symptoms was the antibody tests performed? Large scale data from Iceland show that the vast majority of people who recover from COVID-19 have antibodies measurable using standard assays.<sup>3</sup> The seronegativity in at least four of these children calls into question whether their symptoms are caused by an infection with SARS-COV-2.

In essence, what the article reports are five children that after an initial episode of symptoms compatible with SARS-COV-2 infection developed symptoms that their parents attribute to the children's (putative) infection although four of these children have no detectable sign of having ever been infected with SARS-COV-2 using standard assays. Finally, we wish to press upon that we write this letter with a deep sympathy for the very real suffering of these patients and their families, as well as for everyone affected by long-term symptoms after a SARS-COV-2 infection. However, the answer to

that suffering cannot be that we as a research community relaxes our standard of evidence, which we fear that the article by Jonas Ludvigsson is an example of. It goes without saying that regardless of aetiology, we as physicians have a moral obligation to help these patients as best we can.

## CONFLICT OF INTEREST

None.

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