

# What do we know about COVID-19 in infants?

Dear Editor

It has been observed that adults are more severely affected by COVID-19 than children.<sup>1</sup>

According to the 45 published studies up until 18 March 2020, children account for only 5% of diagnosed COVID-19 cases and they experience milder disease and fewer deaths.<sup>2</sup> Among all infants that were admitted to hospital, only 7% (11 infants) needed intensive care support with ventilation. China has reported a study of nine infants that needed intensive care support with mechanical ventilation because of serious complications.<sup>3</sup> One infant passed away within four weeks of admission due to multi-organ failure caused by COVID-19. One infant died due to complications of intussusception. In another study, 33 infants suffered from serious infections and seven infants were critically ill, but no infant died.<sup>4</sup>

Five neonates aged <28 days with confirmed COVID-19 were recorded in three studies.<sup>5,6</sup> Among these, four neonates were born via caesarean section to COVID-19 mothers; their nasopharyngeal and anal swabs were positive for SARS-CoV-2 within 48 hours of life. Three neonates were born at term and one was born at 31<sup>+2</sup> weeks' gestation and required admission to the NICU and ventilation. On day 22 of life one neonate tested positive for SARS-CoV-2; it showed vomiting and milk rejection as clinical signs and had a history of previous hospital admissions. All five neonates had pneumonia-like X-rays and CT scans. Among this age group, no deaths have been reported.

Raba et al performed a systematic review to evaluate the clinical characteristics of COVID 19 in neonates and children less than one year of age from studies published 1 January 2020 to 7 April 2020.<sup>7</sup> They included 18 articles covering 160 infants in their final review. The most common clinical symptoms were fever (54%) and cough (33%). Lymphocytosis in infants with COVID-19 was

the most prevalent laboratory abnormality. Most infants were treated symptomatically with frequent use of various empirical medications. Infants and neonates tended to have more severe COVID 19 disease than older children but morbidity and mortality were low.

Although it would seem that infants are less affected by COVID-19, new data are constantly emerging and it is important that neonatal healthcare professionals remain up-to-date with the potential impact of COVID-19 on infants, their mothers, clinical practice and themselves.

Yours sincerely

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