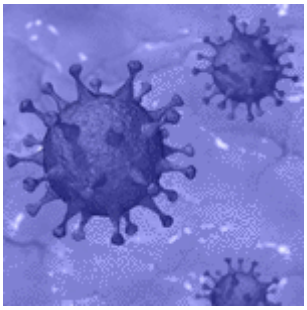
# The different clinical characteristics of COVID-19 between children and adults.



In this Chinese study, clinical, biological and radiological data from nine children infected with the COVID-19-causing virus, SARS CoV-2, and their families were collected (Su et al., 2020). All the children tested SARS-CoV-2 positive after their families' infection. In children, 22.2% suffered from fever, 11.2% suffered from cough, and 66.7% had no symptoms. Among the adult group, the major symptoms included fever (57.1%), cough (35.7%), chest tightness/pain (21.4%) and sore throat (7.1%). About third of adults had decreased white blood cell counts, and 50% had lymphocytopenia. There were ten adults (71.4%) showing abnormal imaging: mainly pulmonary consolidation (70%), nodular shadow (50%), and ground-glass opacity (50%). Five discharged children were re-admitted due to positive SARS-CoV-2 PCR result in their stool.

Su et al., showed that COVID-19 in children has a mild or asymptomatic clinical process, which is a largely better prognosis than that in adults. However, PCR positivity in stool seems to suggest that SARS-CoV-2 lasts longer in children than in their family members. Since PCR detects viral DNA and not viable virus this finding does not confirm long-term viability of the virus in children. A study by Dong et al., further suggests an age stratification of disease severity, where young children and infants (< 5 years) had a higher incidence of severe COVID-19 compared to older children

(> 5 years). ***(Also read: Why is COVID-19 so mild in children?)***

A systematic review of 45 publication by Ludvigsson, highlights that less than 5% of COVID-19 patients are children, who predominantly experience asymptomatic or mild disease. Reasons for reduced morbidity are yet to be known. Some suggestions include co-morbidity with other viral infections or reduced expression and/or maturation of ACE-2, SARS-CoV-2 binding target for cell entry.

**Reference**:


- Coronavirus Disease 2019 in Children — United States, February 12–April 2, 2020
- Dong *et al.*, 2020. Epidemiological Characteristics of 2143 Pediatric Patients With 2019 Coronavirus Disease in China. Pediatrics
- Ludvigsson 2020. Systematic review of COVID-19 in children shows milder cases and a better prognosis than adults. Acta Paediatrica
- Su *et al.* 2020. The different clinical characteristics of coronavirus disease cases between children and their families in China – characterization of children with COVID-19. Emerging Microbes and Infections.


*Article by: Sawsan FEKI*