

A study of epidemiological and clinical features in children with COVID-19 infection admitted at tertiary care hospital

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Abstract

Background: Limited data is available on epidemiological features and clinical manifestations of COVID 19 disease in children. Present study aimed to analyse demography, epidemiology, clinical features and outcome in children infected with COVID-19 admitted at a tertiary care institution.

Material and Method: A retrospective study was carried out evaluating data of 209 cases, admitted at a dedicated COVID hospital from March 2020 to February 2021. **Results:** Data of 209 children, from age 1 month to 12 years with confirmed diagnosis of COVID-19 with a mean age of 4.7 ± 3.6 years and male-female ratio of 1.09:1 were studied. 177(84.68%) patients were from identified containment zone. Overcrowding was observed in 115 (55.02%) cases. Close contact with positive family members was observed in 166 (79.42%) cases with majority coming from lower middle socio economical class. 60 (28.71%) patients were asymptomatic and 149 (71.29%) were symptomatic. Among symptomatic patients, 118 (79.19%) patients had fever as the main presenting complaint. Positive findings on chest radiograph were found in only 25 (11.96%) patients. In asymptomatic and mild cases, chest radiograph was found to be normal. Vitamin D deficiency was observed in 170 (81.34%) patients. A total of 206 patients (98.56%) recovered while 3 patients (1.43%) died. **Conclusion:** A milder disease pattern is observed in majority of children with COVID 19. There is higher disease burden observed in lower middle socio-economic class with majority of children having positive household contact. Majority of cases recover with supportive treatment while treatment modalities like oxygen therapy, mechanical ventilation, steroids and low molecular weight heparin are required only in moderate to severe case. Mortality is observed in patients with severe disease and having co-morbidities.

Key words: Paediatric COVID -19, Epidemiology, Clinical Characteristics, Vitamin D