39th Euro Global Summit and Expo on Vaccines & Vaccination

conferenceseries.com

July 05-06

WEBINAR

Danial Habibi, J Vaccines Vaccin 2021, Volume 12

Clinical features of COVID-19 infection in children: A systematic review and meta-analysis

Danial Habibi

Isfahan University of Medical Sciences, Iran

This study aims to analyze COVID- 19 in children by summarizing the clinical in recent observational studies. This systematic review was conducted, using Medline/PubMed, Scopus, Web of Sciences, and Google Scholar, to identify studies published on COVID-19 following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The keywords used to search the studies were: "Novel coronavirus", "Novel coronavirus 2019", "2019 nCoV", "COVID-19", "Wuhan coronavirus", "Wuhan pneumonia", and "SARS-CoV- 2", up to April 14, 2020. A total of 569 articles were initially retrieved and 32 articles were finally selected for full-text assessment. The metaanalysis was performed using Stata software version 14 (StataCorp. 2015, Stata Statistical Software: Release 14, College Station, TX). Heterogeneity was assessed with the Q test and quantified numerically using the I² index. For I² < 50%, i.e., non-heterogeneity, a fixedeffects model was applied; otherwise, a random-effects model was used with the estimate of heterogeneity being taken from an inverse-variance model. Out of the 32 publications, three were performed in Iran, the United States, and Spain and the other 29 studies were conducted by Chinese researchers. The total sample size consisted of 759 children, of whom 399 were male. However, several clinical symptoms were reported in different studies; the most frequent symptoms were fever, cough, vomiting, diarrhea, sore throat, and dyspnea. Regarding the clinical manifestations, fever (46%, 95% CI 40–53%), cough (37%, 95% CI 29-46%), diarrhea (19%, 95% CI 9-28%), and pharyngalgia (13%, 95% CI 5-20%) were the most commonly reported symptom in children. This review study showed that clinical presentations were milder, the prognosis was better, and the mortality rate was lower in children with COVID-19 compared with adult patients; however, children are potential carriers, like adults, and can transmit the infection among the population. Therefore, early identification and intervention in pediatric patients with COVID-19 are essential to control the pandemic. Moreover, gastrointestinal symptoms were more common symptoms among children.