

# Coronavirus disease 2019 infection in pediatric patients in Korea: insights and implications

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See “Clinical features of coronavirus disease 2019 in Korean pediatric patients: a single-center retrospective study” by Ji Eun Jeong, Hai Lee Chung, Young Hwan Kim, Nawon Lee, Younghyun Kim, Yoon Young Jang

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes coronavirus disease 2019 (COVID-19), remains a topic of considerable concern and interest worldwide [1,2]. With over 500,000 reported deaths attributed to COVID-19 infections [3], it is crucial to understand the pandemic's impact on children to address concerns associated with the infection [4]. Therefore, understanding the unique signs and effects of the COVID-19 virus in the pediatric population is of the utmost importance.

In the current issue of the *Kosin Medical Journal*, Jeong et al. [5] present an analysis of clinical characteristics and outcomes of COVID-19 in pediatric patients based on cases from a single institution in Korea. The study found that out of 311 pediatric patients diagnosed with COVID-19, the majority were aged 6–11 years [5]. Fever was the most common symptom, and its prevalence decreased with age. When comparing clinical characteristics of patients aged 6 and older in the asthma and non-asthma groups, no significant differences were observed in symptoms such as cough, runny nose, nasal stuffiness, and dyspnea. Adolescents were categorized into two groups: those who had completed the basic two-dose vaccination regimen and those who had not. There was no difference in the average time from

COVID-19 diagnosis to clinic visit between the vaccinated and unvaccinated groups. However, the incidence and peak values of fever were significantly lower in the vaccinated group. The study underscores the importance of vigilance in pediatric patients with underlying conditions like allergic rhinitis and precocious puberty, even though children generally exhibit milder symptoms than adults [5]. Precocious puberty, marked by the early onset of puberty, may suggest an underlying endocrine or metabolic imbalance that could affect the immune response to infections [6]. Children with such conditions may need closer monitoring during a COVID-19 infection due to their potentially altered physiological state, which could make them more susceptible to severe outcomes. The study also noted a significantly higher incidence of post-acute COVID-19 syndrome, such as a cough persisting for more than 4 weeks, in the asthma group. Long COVID-19 syndrome, characterized by prolonged symptoms like persistent cough and fatigue, can impact children's daily activities and overall well-being. Additionally, although not covered in this study, it is crucial to be aware that some pediatric COVID-19 patients may develop multisystem inflammatory syndrome in children (MIS-C) [7,8]. MIS-C is a serious condition that can emerge

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weeks after infection, involving inflammation across multiple organ systems and necessitating immediate medical attention. Therefore, it is important to monitor and promptly address potential complications.

This study highlights the necessity for ongoing research to fully understand the complex and varied clinical manifestations of COVID-19 in children. Additionally, the observation that 90% of the families or cohabitants of pediatric patients also contracted the infection has profound implications for infection control and public health policy [5]. By clarifying the clinical spectrum of COVID-19 in pediatric patients, healthcare providers can more effectively customize diagnostic and treatment strategies, ensuring timely interventions and optimal outcomes [9]. Moreover, these findings highlight the critical importance of pediatric-specific preventive measures, including vaccination and infection control strategies, in safeguarding the health and well-being of children [1].

While this study has limitations due to its single-institution scope and limited duration, it offers valuable data on the clinical characteristics of COVID-19 in Korean pediatric patients. The insights derived from this research can help reduce anxiety about COVID-19 infections in children. However, further large-scale domestic studies are necessary to validate these findings.

## Article information

### Conflicts of interest

No potential conflict of interest relevant to this article was reported.

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### Author contributions

All the work was done by YJJ.

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