

## **Coronavirus-19 Outbreak in Children: Different clinical status of a disease in children and the effect of isolation on education and social life, globally**

Dear Editor,

COVID-19 disease, caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), first appeared in Wuhan, China, and spread throughout the world in a short period of time (1). On 30 January 2020, WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC) and then on 11 March 2020, WHO declared the Coronavirus as a pandemic. The pandemic was called as COVID-19.

SARS-CoV-2 can easily pass from animal to human, human to human, and through droplet and direct contact with asymptomatic carriers. According to the recently published analysis of data from the Chinese Wubei Mainland region and 37 countries, the disease is fatal, especially in the elderly and comorbid population. According to the data from this study, no deaths were observed in the 0-9 age range. Only 1 death was observed in 549 cases in the 9-18 age range and the death ratio was calculated as 0.00182 (2). The most important position of children in the COVID-19 outbreak may be that they have a carrier function because they have asymptomatic or mild disease. While governments of the countries develop strategies to deal with the outbreak, they firstly try to reduce the rate of transmission through the closure of schools. According to UNESCO data, schools were closed in 158 countries and 1,213,390,181 of the enrolled students worldwide remained out of formal education. This number indicates that 69.3% of all enrolled students are affected. According to World Bank data, it is aimed to contribute students to continue their education by using distance education, online or e-learning applications in 37 countries (3). COVID-19 is more often seen in children with asymptomatic or very mild symptoms. Symptoms are still not clear in children who are diagnosed with COVID-19. The most common symptoms are cough, fever, weakness, runny nose, nausea, abdominal pain and diarrhea in some children. Dong et al, using data from the Chinese Centers for Disease Control and Prevention in a study, reported that more than 90% of the 2143 pediatrics diagnosed with COVID-19 are mild or moderate to severe cases and the likelihood of severe disease was calculated as 6% in children, which was 18.5% in adults (4).

In conclusion, the COVID-19 pandemic, which affected the whole world, affected groups of all ages in various social areas. Although children survive the disease asymptotically or with mild symptoms and the pediatric mortality rate is very low, they are the group most affected by social isolation and changing educational opportunities have affected the children's daily life schedule. Since it is not yet clear how long the outbreak will last, distance education formulas should be supported and new education tools should be encouraged. It should be considered that the long duration of the pandemic in the world and the prolonged quarantine processes in countries can affect children's social, psychological, spiritual and physical development, and that the WHO, UNESCO, the US and governments should prepare new solution policies for these potential global problems. In children, obesity, endocrinological problems, vitamin D deficiency, inactivity, screen addiction, social phobia and anxiety disorder may be seen due to staying at home for a long time, it is necessary to take precautions for these possible situations. We believe that the COVID-19 pandemic may affect pediatric population more socially and psychologically than disease.

## **Disclosures**

**Conflict of Interest:** None declared.

**Authorship Contributions:** Surgical and Medical Practice – Y.H.O; Concept – M.Ş.; Desing – H.H.K.Ş.; Data collection &/or processing – M.Ş.; Analysis and/or interpretation – H.H.K.Ş.; Literature search – Y.H.O.; Writing – Y.H.O, M.Ş., H.H.K.Ş.

## **References:**

1. Hui DS, I Azhar E, Madani TA, Ntoumi F, Kock R, Dar O, et al. The continuing 2019-nCoV epidemic threat of novel coronaviruses
2. Robert Verity, Lucy C Okell, Ilaria Dorigatti, Peter Winskill, Charles Whittaker, Natsuko Imai, and others. [Estimates of the severity of coronavirus disease 2019: a model-based analysis](#) *The Lancet Infectious Diseases*; Published: online March 30, 2020
3. [https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19 pandemic](https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19-pandemic)

4. Dong Y, Mo X, Hu Y, et al. Epidemiological characteristics of 2143 pediatric patients with 2019 coronavirus disease in China. *Pediatrics*. 2020; doi: 10.1542/peds.2020-0702