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EDITORIAL



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Dear clinicians, researchers, colleagues and friends!

Environment and climate change, global warming, growth of population density, population mobility and migration activity facilitate the spread of new dangerous infections over the globe. Acceleration of the migration processes, urbanization due to growth of the population, which according to UN prognosis may reach 10 billion people by 2050 together with insufficient biological safety of the population, puts forward a number of drastic problems.

The outbreak of pneumonia of unknown etiology in Wuhan, China, which was officially mentioned for the first time on 31 December 2019 by WHO China Country Office, attracted attention not only of specialists but of the international community as a whole; whereas on 30 January 2020 the WHO recognized the outbreak of COVID-19 as a global emergency. On 11 March 2020 the WHO declares it a pandemic, for the first time since the 2009 H1N1 pandemic.

Luckily, COVID-19 mostly spares younger children. According to the WHO data, susceptibility to it among children younger than 10 years in Switzerland was 0,4%, among those aged 10 to 19 years — 2,6% from all COVID-19 patients. In Sweden the incidence among children younger than 10 years was within 0,5% and adolescents aged 10 — to 19 years — 1,3% from all reported cases of COVID-19. In Spain patients under the age of 18 years accounted for about 0,8% of all COVID-19 patients. In other parts of the globe the prevalence among children barely varies. In India the incidence among children under 10 years was 2,5%, and among those aged 10 to 19 — 5%, while in Island there were no reported COVID-19 cases among children under 10 years, and among older children — less than 0,8%.

Among precautionary measures related to perinatology and pediatrics, specialists suggest to monitor the following: risk of unfavorable impact of COVID-19 on fetal development, outcomes of the pregnancy and the newborn condition in the neonatal period; special attention to the newborns whose mothers had confirmed COVID-19; recommendations on breast feeding; clinical manifestations and laboratory abnormalities in children with confirmed COVID-19; elaborating criteria for pediatric patients with COVID-19 for identifying groups at the greatest risk of a severe course and unfavorable outcomes.

The currently available references explain the mild course and a low susceptibility of children to COVID-19 by such factors as age-specific immune response, more elastic respiratory system due to environmental hazards and a shorter impact of viruses on the airways. Besides, angiotensin-converting enzyme II acts as a functional receptor for the family Coronaviridae in children.

The recommendations of the Emergency Committee established by WHO, and International Medical Regulations on Pneumonia caused by SARS-CoV-2 state that the asymptomatic and mild course of COVID-19 in children may lead to underestimation of the role of children in spreading the novel infection. Therefore, in conditions of continuing pandemics it is necessary to adopt drastic measures on reduction of contacts between children and vulnerable populations. This will enable to prevent severe illnesses and unfavorable outcomes.

In section Pediatrics we present the paper featuring clinical and epidemiological characteristics of COVID-19 in children aged 0 to 16 years with

laboratory confirmed diagnosis in Volgograd Region, Russia. The authors identified clinical manifestations of COVID-19 that are specific to children. The analysis of the laboratory data (clinical, serological, molecular genetic testing) and results of instrumental studies with a separate SARS-CoV-2 RNA obtained by PCR method from upper respiratory tract samples. Further development of comprehensive algorithms for diagnosis and treatment of COVID-2019 will improve healthcare efficiency in combating the virus.

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