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Clinical-Epidemiological Characteristics of Children Hospitalized with COVID - 19 in the Republic of Moldova

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Abstract

Despite the spread of SARS-CoV-2 infection, knowledge of the symptomatology, modalities of transmission, severity and prognosis is limited. Based on the complex analysis of the 701 pediatric cases, from 5 public medical-health institutions in the Republic of Moldova, positively diagnosed with SARS - CoV-2 infection by the RT-PCR molecular method, 73% of the children were in close contact with a COVID-19 positive person in the last 14 days until the illness. Most of the hospitalized children develop moderate clinical forms of COVID-19 (84.17% cases). The mean age of children with severe form is lower compared to those with moderate or mild form. The sex of patients does not influence the course of the disease. Children's age influences paternal manifestations: children of preschool age (<7 years) more often show high fever, changes in consciousness, drowsiness, rash, diarrhea and dyspnea, while children > 10 years: headache, pharyngitis, hypo/anosmia, ageusia, myalgia, arthralgia and vertigo. No statistical correlations were found between the form of the disease and the presence of comorbidities. The evolution of pediatric COVID-19 infection is favorable, considering that 97.57% of children do not show clinical manifestations at discharge. Knowledge of various clinical pictures of infection with the SARS-CoV-



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2 virus would allow the doctor to make an early diagnosis, administer adequate treatment and establish preventive measures.

Keywords: SARS-CoV-2 infection, Pediatric cases, Epidemiology, Comorbidity, Symptoms

References

1. World Health Organization (WHO). WHO Director-General's opening remarks at the media briefing on COVID-19, 11 March 2020 (2020). Accessed 11 Mar 2020.
<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
2. Xu, Y., Li, X., Zhu, B., et al.: Characteristics of pediatric SARS-CoV-2 infection and potential evidence for persistent fecal viral shedding. Nat Med. (2020). <https://doi.org/10.1038/s41591-020-0817-4>
3. Infecția cu coronavirus de tip nou (COVID-19), PCN 371.
<https://msmps.gov.md/>
4. Castagnoli, R., et al.: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in children and adolescents: a systematic review. JAMA Pediatr. **174**(9), 882 (2020).
<https://doi.org/10.1001/jamapediatrics.2020.1467> [Google Scholar](#)
5. Chan, J.F., Yuan, S., Kok, K.H., et al.: A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet **395**(10223), 514–523 (2020).
[https://doi.org/10.1016/S0140-6736\(20\)30154-9](https://doi.org/10.1016/S0140-6736(20)30154-9)
[Google Scholar](#)
6. World Health Organization. Coronavirus disease 2019 (COVID-19): situation report 45 (2020). Accessed 5 Mar 2020.
https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200305-sitrep-45-covid-19.pdf?sfvrsn=ed2ba78b_4
7. Chen, Z.M., Fu, J.F., Shu, Q., et al.: Diagnosis and treatment recommendations for pediatric respiratory infection caused by the 2019 novel coronavirus. World J Pediatr. (2020). Accessed 25 Feb 2020,
<https://doi.org/10.1007/s12519-020-00345-5>
8. Wu, Z., McGoogan, J.M.: Characteristics of and important lessons from the coronavirus disease 2019 (covid-19) outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. JAMA (2020). Accessed 24 Feb 2020, <https://doi.org/10.1001/jama.2020.2648>
9. Chen, T., Wu, D., Chen, H., et al.: Clinical characteristics of 113 deceased patients with coronavirus disease 2019: retrospective study. BMJ **368**, m1091 (2020).
<https://doi.org/10.1136/bmj.m1091>
[Google Scholar](#)



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10. Rasmussen, S.A., Thompson, L.A.: Coronavirus disease 2019 and children: what pediatric health care clinicians need to know. *JAMA Pediatr.* (2020). Accessed 3 Apr 202, <https://doi.org/10.1001/jamapediatrics.2020.1224>