

Management of children with COVID-19

¹Mrs. Bandhu Sharma, ²Dr. S.P. Subashini, ³Mrs. Hema, ⁴Mr. Bhupender

¹Nursing Tutor, Child Health Nursing, Galgotias School of Nursing, Galgotias University, Greater Noida

²Dean, Medical Surgical Nursing, Galgotias School of Nursing, Galgotias University, Greater Noida

³Nursing Tutor, Obstetrics and Gynecology, Galgotias School of Nursing, Galgotias University, Greater Noida

⁴Nursing Tutor, Mental Health Nursing, Galgotias School of Nursing, Galgotias University, Greater Noida

Abstract:

Coronavirus disease 2019 (COVID-19) is a disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease was first reported in December 2019 from Wuhan, Hubei province, China and has since spread throughout the world. The World Health Organization declared a global pandemic on March 11, 2020. Relatively few cases have been seen in children thus far; in China, only about 2.4% occurred in those under 19 years of age. Most cases in children are mild, and treatment consists of supportive care.

Key Words:

COVID-19, Respiratory syndrome, WHO, Children, SARS

This disease was named as '2019 novel corona virus' or '2019-nCoV.' The COVID-19 virus is a new virus belongs to the same family of viruses as Severe Acute Respiratory Syndrome (SARS. Severe acute respiratory syndrome coronavirus 2 (SARS CoV-2) is a highly infectious virus, and the main routes of transmission are: Respiratory droplets and contact with respiratory secretions and saliva. SARS CoV-2 can remain intact on various surfaces for hours to days, although transmission is much more common through respiratory droplets. Fecal shedding has been detected for several weeks after diagnosis, which has led to concerns about fecal-oral transmission of the virus. No confirmed cases of mother-to-fetus intrauterine transmission was seen. SARS CoV-19 has not been detected in breast milk. Family clustering is a major role in disease transmission.

Hand hygiene is very important. Wash hands often with soap and water for at least 20 seconds; if water and soap are not available, use an alcohol-based hand sanitizer. Keep hands off your face. Avoid touching your eyes, nose, and mouth with unwashed hands. Maintain social distancing. Maintain social distancing at least 3 feet (1 meter) who are sick, and stay at home when you are sick. Proper cough and sneeze etiquette.

The American Academy of Pediatrics Committee on Fetus and Newborn, Section on Neonatal Perinatal Medicine, and Committee on Infectious Diseases has issued guidance on the management of infants born to mothers with coronavirus disease 2019 (COVID-19). Neonates can be infected by SARS-CoV-2 after birth. At birth babies are immature because of their immune systems, they are vulnerable to serious respiratory viral infections.

Staff attending deliveries involving women with COVID-19 should observe airborne, droplet, and contact precautions owing to the increased risk of aerosolized virus and the potential requirement for administering resuscitation to newborns with SARS-CoV-2 infection. mothers with COVID-19 should be separated from their newborns. These newborns should be kept in isolation. Families who kept the newborn near the mother should be educated concerning the potential risks of SARS-CoV-2 transmission.

Newborns should undergo testing for SARS-CoV-2 at 24 hours and 48 hours (if still at the birth facility) after birth. Centers with limited testing resources can make testing decisions on a case-by-case basis. Newborns who are at risk for postnatal transmission because of testing inability require frequent outpatient follow-up (via telephone or telemedicine) or in-person assessments for 14 days after discharge.

Proper nutrition and hydration are vital. Eat a balanced diet for healthy, stronger immune systems and lower risk of chronic illnesses and infectious diseases. Eat a variety of fresh and unprocessed foods every day to get the vitamins, minerals, dietary fiber, protein and antioxidants body needs. Eat fruits, vegetables, legumes (e.g. lentils, beans), nuts and whole grains. Water is essential for life.

Respiratory hygiene and cough etiquette helps to prevent patients with respiratory infections from transmitting their infection to others. prone position (PP) during mechanical ventilation (VM) in patients with Acute Respiratory Distress Syndrome (ARDS) is able to improve oxygenation and reduces mortality.

Conclusion

Most children infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) have asymptomatic infection or mild illness, severe illness has been reported in 2.5% of pediatric cases in China, according to the World Health Organization (WHO). Children and adolescents tend to have a mild COVID-19 symptoms with a good prognosis.

References

1. Ludvigsson JF. Systematic review of COVID-19 in children show milder cases and a better prognosis than adults. Acta Paediatr. 2020 Mar 23.
2. Ministry of Health and Family Welfare. Available from: <https://www.mohfw.gov.in>. Accessed on April 08, 2020.

3. Brodin P. Why is COVID-19 so mild in children? *Acta Paediatr.* 2020 Mar 25. [Epub ahead of print]. Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/apa.15271>. Accessed on April 06, 2020.
4. Chawla D, Chirla D, Dalwai S, Deorari AK, Ganatra A, Gandhi A, et al. Perinatal-Neonatal Management of COVID-19 Infection - Guidelines of the Federation of Obstetric and Gynecological Societies of India (FOGSI), National Neonatology Forum of India (NNF), and Indian Academy of Pediatrics (IAP). *Indian Pediatrics.* 2020 Apr 01.
5. <https://www.who.int/health-topics/coronavirus>
6. <https://forum.facmedicine.com/threads/breaking-news-favilavir-approved-as-experimental-coronavirus-drug.47832/>
7. <https://www.medscape.com/>
8. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>

