Joint Position Statement
May 2020

Mothers with COVID-19 and Their Newborn Infants

Issue: Shared Decision Making

The National Association of Neonatal Nurses (NANN) and the National Perinatal Association (NPA) fully support the **incorporation of a shared-decision model between the mother and the clinical team** to determine the best care for the mother-newborn dyad.

NANN and NPA **encourage the ideal scenario**, which is to keep mother and newborn together **while respecting the unique challenges** individual institutions may encounter.

While we recognize the myriad uncertainties in understanding the best evidence-based practice for the mother-newborn dyad during the postpartum period, we encourage families and clinicians to remain diligent in learning **up-to-date evidence** and ultimately **working in partnership** for the safest and best practice for all parties involved.

NANN and NPA acknowledge the **potential trauma** and exacerbation of **postpartum mental health issues** that may negatively impact the fourth trimester.

We encourage healthcare providers to assist the mother to **recognize the ideal versus realistic scenarios**, **acknowledge the uncertainty and grief** over changing expectations, and **consider higher-touch care** in the weeks following delivery.

Discussion

NANN and NPA have reviewed the recommendations from the American Academy of Pediatrics (AAP) [1], Centers for Disease Control and Prevention (CDC)[2], and the World Health Organization (WHO) [3] regarding mother-newborn infant postpartum care in the hospital if a mother is COVID-19+. **All statements support and emphasize the importance of a shared-decision model** between mother and the healthcare provider team to determine the need for postpartum separation of the mother-newborn dyad while they are in the hospital.

What Is Known

- Empirical evidence to date has **not shown vertical transmission** of the virus through the placenta, amniotic fluid, or breastmilk.[4-9]
- **Mortality rates for neonates specific for COVID-19 are minimal**. Seven reports from China,[4,-7;10-12] one multicenter report from Italy,[13] and one multicenter report from New York City [14] have published data on pregnant women who are COVID-19+ delivering newborns during this pandemic. A total of 127 neonates born to mothers who are COVID-19+ were reviewed from the nine published studies. One preterm infant death was noted.[12] However, this preterm neonate did not test positive for COVID-19 on day of life. [9] No other fatalities were reported.

Challenges

- **Small sample sizes** and mother-infant separation practices varied between the institutions.
- Vertical transmission **cannot yet be ruled out**.
- **Horizontal transmission** from mother to newborn may occur, thereby increasing exposure risk to additional clinicians caring for the newborn.
- **Limited resources.** Necessary resources such as personnel, physical space, personal protective equipment (PPE), and medical technologies – including additional isolettes – must be available to safely care for the emergent medical needs of mother-baby dyads.

New data emerge daily.

NANN and NPA encourage perinatal care providers to **engage in candid conversations with pregnant parents prior to delivery** regarding risks, benefits, limitations, and realistic expectations.

We appreciate WHO's recommendation to **keep mother-newborn dyads together** and emphasize using **good respiratory and hand hygiene** at all times.

We support this recommendation so long as it is a **shared decision between mother and clinical team**, which includes all affected care providers (e.g., nursing, obstetric, and pediatric clinicians), and is feasible for the institution at that time.

We affirm the importance of neonatal attachment during the first days of life as discussed by WHO [3] and recognize the unknown risk of exposure to the COVID-19 virus as expressed by AAP[1] and CDC. [2]

Another important consideration is that these **mother-infant dyads are discharged from postpartum care to a same home environment**. Therefore, we recommend clinicians and researchers working with this population to **collect data throughout the entire neonatal period and publish timely reports** to help us further understand longitudinal outcomes of neonates exposed to COVID-19, which will help inform and guide the evidence for postpartum care during this pandemic and future pandemics.

References

1. Puopolo, K.M, Hudak, M. L., Kimberlin, D.W., & Cummings, J. (Apr 2, 2020). Initial guidance: Management of infants born to mothers with COVID-19. Retrieved from American Academy of Pediatrics website: https://downloads.aap.org/AAP/PDF/COVID%2019%20Initial%20Newborn%20Guidance.pdf

2. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (April 4, 2020). Considerations for inpatient obstetric healthcare settings. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html

3. World Health Organization. (April 22, 2020). What matters to women in the postnatal period? Retrieved from https://www.who.int/news-room/detail/22-04-2020-what-matters-to-women-in-the-postnatal-period

4. Zeng, L., Xia, S., Yuan, W., Yan, K., Xiao, F., Shao, J., & Zhou W. (2020). Neonatal early-onset infection with SARS-CoV-2 in 33 neonates born to mothers with COVID-19 in Wuhan, China. JAMA Pediatrics. Advance online publication. doi: 10.1001/jamapediatrics.2020.0878

5. Wang, X., Zhou, Z., Zhang, J., Zhu, F., Tang, Y., & Shen, X. (2020). A case of 2019 Novel Coronavirus in a pregnant woman with preterm delivery. Clinical Infectious Diseases. Advance online publication. doi: 10.1093/cid/ciaa200

6. Chen, H., Guo, J., Wang, C., Luo, F., Yu, X., Zhang, W., ... Zhang Y. (2020). Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: A retrospective review of medical records. The Lancet, 395, 809-815. doi: 10.1016/S0140-6736(20)30360-3

7. Liu, W., Wang, Q., Zhang, Q., Chen, L., Chen, J., Zhang, B., ... Sun, Z. (2020). Coronavirus disease 2019 (COVID-19) during pregnancy: A case series. Preprints, 2020020373. Advance online publication.

8. Di Mascio, D., Khalil, A., Saccone, G., Rizzo, G., Buca, D., Liberati, M., ... D'Antonio, F. (2020). Outcome of Coronavirus spectrum infections (SARS, MERS, COVID 1-19) during pregnancy: A systematic review and meta-analysis. American Journal of Obstetrics & Gynecology MFM. Advance online publication. doi: 10.1016/j.ajogmf.2020.100107

9. Schwartz, D. A. (2020). An analysis of 38 pregnant women with COVID-19, their newborn infants, and maternal-fetal transmission of SARS-CoV-2: Maternal coronavirus infections and pregnancy outcomes. Archives of Pathology & Laboratory Medicine. Advance online publication. doi: 10.5858/arpa.2020-0901-SA

10. Zhang, L., Jiang, Y., Wei, M., Cheng, B. H., Zhou, X. C., Li, J., ... Hu, R. H. (2020). Analysis of the pregnancy outcomes in pregnant women with COVID-19 in Hubei Province. Zhonghua Fu Chan Ke Za Zhi, 55, E009. Advance online publication. doi: 10.3760/cma.j.cn112141-20200218-00111

11. Liu, D., Li, L., Wu, X., Zheng, D., Wang, J, Yang, L., & Zheng, C. (2020). Pregnancy and perinatal outcomes of women with coronavirus disease (COVID-19) pneumonia: A preliminary analysis. AJR. American Journal of Roentgenology. Advance online publication. doi: 10.2214/AJR.20.23072

12. Zhu, H., Wang, L., Fang, C., Peng, S., Zhang, L., Chang, G., Xia, S., & Zhou, W. Clinical analysis of 10 neonates born to mothers with 2019-nCoV pneumonia. Translational Pediatrics, 9(1), 51–60.

13. Ferrazzi, E., Frigerio, L., Savasi, V., Vergani, P., Prefumo, F., Barresi, S., … Cetin, I. (2020). Mode of delivery and clinical findings in COVID-19 infected pregnant women in Northern Italy. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3562464

14. Breslin, N., Baptiste, C., Gyamfi-Bannerman, C., Miller, R., Martinez, R., Bernstein, K., ... Goffman, D. (2020). COVID-19 infection among asymptomatic and symptomatic pregnant women: Two weeks of confirmed presentations to an affiliated pair of New York City hospitals. American Journal of Obstetrics & Gynecology MFM. Advance online publication. doi: 10.1016/j.ajogmf.2020.100118