

The impact of COVID-19 on breastfeeding

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Direct breastfeeding has well-established benefits to the mother-infant dyad including bonding, infant immune system support, and infant growth and metabolism. The COVID-19 pandemic disrupted hospital-based maternity and newborn care models as well as post-discharge professional and peer breastfeeding support. We sought to better understand the impact of the pandemic on breastfeeding practices in our unique population in New York City, which was one of the first and hardest-hit hot spots of the pandemic in the United States. The study population is a part of Columbia University's COVID-19 Mother Baby Outcomes (COMBO) initiative. Mother-infant dyads were recruited to COMBO as three groups: SARS-CoV-2 unexposed, SARS-CoV-2 exposed, and a stress and procedural control group comprised of pre-pandemic deliveries in February 2020. SARS-CoV-2 exposure was defined as a positive nasal PCR or serology during pregnancy. Breastfeeding practice surveys were completed longitudinally at approximately one-, two-, four-, and six-months post-partum. A total of 557 mother-infant dyads responded to the breastfeeding surveys over the four study time points (n=69 pre-pandemic controls, n=267 SARS-CoV-2 unexposed, and n=221 SARS-CoV-2 exposed). These three groups had different maternal ethnicity (56% Latinx in the pre-pandemic group vs. 42% Latinx in the unexposed group vs. 73% Latinx in the exposed group, $p < 0.001$) and different medical coverage (49% Medicaid in the pre-pandemic group vs. 39% Medicaid in the unexposed group vs. 57% Medicaid in the exposed group, $p < 0.001$). We found that more unexposed dyads reported a feeding type of exclusively or mostly breastmilk at the one-, two-, and four-month study time points. Additionally, women who self-reported Latinx ethnicity were also less likely to breastfeed regardless of exposure. In a logistic regression model, we found the interaction between infection status and ethnicity to be the significant predictor of less breastfeeding. This, combined with increased risk of SARS-CoV-2 exposure in the Latinx group, resulted in a "two-hit" decrease in breastfeeding. Our data highlights an additional example of health inequities brought to light and exacerbated by the pandemic.