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Messenger RNA Vaccine in Mother's Milk

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To the Editor:

After reading the article by Hanna *et al.*,¹ we had concerns with their conclusions that do not seem to be supported by the data. This study included a sample of 11 lactating women with trace amounts of messenger RNA (mRNA) found in the breast milk of 5 women within 45 hours of monovalent mRNA COVID-19 vaccination. Based on these findings, the authors recommended caution regarding breastfeeding infants younger than 6 months within 48 hours of maternal vaccination and raised unfounded concerns about potential interference with routine infant vaccinations.

It is well-established that COVID-19 can cause severe illness in pregnant women, including hospitalization, adverse pregnancy outcomes, and death,² and that maternal antibodies from COVID-19 vaccination are transferred to the fetus via the umbilical cord² and infant via human milk.³ Extraordinary efforts have been taken to examine the safety of COVID-19 vaccination, including monitoring for adverse events among lactating women and their infants.² While Hanna *et al.*¹ have demonstrated the ability to identify mRNA in breast milk, a comprehensive review of COVID-19 vaccination in lactating women concluded there is no evidence that vaccination poses additional risk to either women who breastfeed or their infants.³ Additionally, the current body of evidence demonstrates overall that coadministration of mRNA vaccines and other routine vaccines does not interfere with immune response to or affect safety of coadministered vaccines beyond the potential for slightly higher reactogenicity.⁴ The US Centers for Disease Control and Prevention recommends that COVID-19 vaccines may be administered simultaneously with other age-appropriate vaccinations when indicated.

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Vaccines are critical for protecting pregnant and lactating women and their infants from severe COVID-19 illness. Misinformation and conjecture about risks have led to substantial vaccine hesitancy among women of reproductive age,⁵ including those who are pregnant and lactating. Hanna et al¹ have not provided evidence for their call for caution or that their findings would cause interference with infant vaccinations. Recommending caution in the absence of a known or potential biological risk to the infant extrapolates the data to an unsupported conclusion. We are concerned their conclusions could adversely affect the health of lactating women and their infants, potentially negatively impacting breastfeeding or leading to further distrust in vaccine safety. Ongoing studies continue to monitor for any effects, either adverse or beneficial, associated with mRNA in breastmilk, and to determine if there is any clinical significance to this finding.

Disclaimer:

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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