Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

coronavirus 2 (SARS-CoV-2) being introduced into milk samples from the infant saliva via retrograde milk flow was not considered.[2,3] Personal communication with Groß and colleagues confirmed that the infant was fed just before sample collections. SARS-CoV-2 is present in saliva during the first week of signs,[4,5] and the baby showed signs of infection that coincided precisely with the period in which positive milk samplings were collected.

The haste to publish has created possible false narratives associated with major harm (two of the four cited articles in the aforementioned Correspondence[1] were non-peer-reviewed preprints). Since the Correspondence by Groß and colleagues[1] was published, results of larger studies have shown no viable infectious virus in breastmilk and that breastfeeding is probably not a mode of SARS-CoV-2 transmission.[6] Mothers should be supported to establish and continue breastfeeding if they are positive for COVID-19.[7] Epidemiological evidence suggests the harms of breastfeeding cessation disproportionately outweigh the risk of COVID-19 transmission.

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Authors' reply

In the ongoing COVID-19 pandemic, questions regarding possible methods of virus transmission, including the safety of breastfeeding by mothers who are infected, are of great importance. We reported[1] the detection of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA (not viral particles, as incorrectly stated by Natalie Shenker and colleagues) in consecutive milk samples from an infected mother and interpreted our findings with the greatest caution. In particular, we did not claim that SARS-CoV-2 is transmitted via contaminated breastmilk or that breastfeeding should be discontinued by mothers with the infection. Instead, we emphasised that more research is required.

At the time of writing, there are eight other reports of SARS-CoV-2 RNA detection in milk samples,[2] in several cases at multiple timepoints during the course of the infection.Consequently, the now-published review articles that we cited in our Correspondence,[2] which summarised the peer-reviewed publications at the time of submission, are already outdated. In most of these studies, care was taken to avoid environmental contamination (eg, by breast disinfection or washing if feeding occurred before sampling), as also indicated in our Correspondence.

Shenker and colleagues suggest that the detection of SARS-CoV-2 RNA in breastmilk might be the result of retrograde milk flow of infant saliva containing the virus. We feel that this is unlikely; there is no experimental evidence that any virus might be transferred by this route in humans. On the contrary, SARS-CoV-2 contamination from the infant has been excluded in three studies[3–5] reporting viral RNA in milk from mothers, where the infant was either continually COVID-19-negative or separated from the mother, or both. Generally, there are examples of viruses (eg, HIV and human cytomegalovirus) that are shed into breastmilk and might lead to an infection of the neonate, whereas other viruses are shed but typically pose no risk for vertical transmission.[6] Establishing whether either process is relevant for a novel human pathogen requires careful examination.

So far, no cases of SARS-CoV-2 transmission via breastfeeding have been reported, and it has not been established if the virus in this body fluid is infectious. Thus, WHO suggests continuing breastfeeding upon maternal SARS-CoV-2 infection. We agree with this recommendation but feel that further research on this topic to protect neonates and to reassure nursing mothers is highly warranted.


Nastasic/Getty Images

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Cancer and COVID-19

We read, with great interest, about the outcomes in a cohort of patients with cancer and COVID-19 by Nicole Kuderer and colleagues.[1] The authors showed that among patients with cancer and COVID-19, 30-day all-cause mortality was high and associated with general and cancer-specific risk factors, with a mortality of 13·3%.

More data on the cause of mortality in the CCC19 cohort would have been useful. More specifically, how many patients died because of COVID-19-related issues (eg, acute respiratory distress syndrome or organ failure), and how many died because of background disease progression and relevant complications? Finally, how many of these deaths should be attributed to changes in the therapeutic plan caused by COVID-19, including access to care and delays in management?

Information on deaths caused by changes to a patient's care plan is of paramount clinical importance, since data on the incidence of avoidable mortality caused by the effect of the pandemic on health-care resources are scarce. During the pandemic, the management of patients with cancer has been affected at multiple stages, including the triage decisions, surgery, and neoadjuvant therapy as a bridge to reduce admissions and preserve health-care resources.[2] Also, when possible, oncologists are modifying or substituting oral for intravenous chemotherapy with oral agents to minimise admissions to hospital.

In the same vein, omissions, delays, or fragmentation of care can have clinically important adverse influence on quality of life or survival.[2] Unfortunately, the effect on the survival outcomes is not well described in the literature, and data from international cohorts and consortia can be useful.

Finally, the authors did not provide any data on the socioeconomic and insurance status of the patients included in their cohort. It would be interesting to know how many patients with cancer lost their insurance, dependent care, or employment, and how these changes affected their access to care and a treatment plan.

COVID-19 has caused unprecedented societal turmoil, triggering a rapid transformation of health-care systems on a global scale. Emerging data show that the COVID-19 pandemic has the potential to amplify pre-existing disparities, especially for patients with cancer.[3,4] Potential drivers of disparate cancer survival resulting from the pandemic can include variable access to telemedicine, timely diagnosis, and access to treatment. Despite oncology societies proposing guidelines on cancer care during the pandemic, the prioritisation in the delivery of cancer therapies is strongly influenced by the magnitude of potential treatment benefits, therapeutic intent, and the access to care.[5]

All in all, these changes can definitely affect the outcomes of patients with cancer. In this new landscape, when the cancer community is revising the optimal standards of cancer care, research should focus on identifying the factors that contribute to avoidable mortality and facilitate the implementation of strategies to benefit patients.

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Nicole Kuderer and colleagues[1] identified several independent prognostic factors to be conferring an increased risk of 30-day all-cause mortality: increased age, male sex, being a former smoker, multiple medical comorbidities, high Eastern Cooperative Oncology Group performance status score (≥2), and an active cancer. However, haematological malignancies, instead of increasing 30-day all-cause mortality, were associated with severe clinical outcomes, intensive care unit