Letter to the Editor

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Use of Disinfectant Wipes to Sanitize Milk's Containers of Human Milk Bank During COVID-19 Pandemic

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In reply to Marinelli KA and Lawrence RM: "Safe Handling of Containers of Expressed Human Milk in all Settings During the SARS- CoV-2 (COVID-19) Pandemic", Journal of Human Lactation, April 2020.

We comment this paper reporting our experience in Italy during current COVID-19 pandemic. Although there is no current evidence of SARS-CoV-2 vertical transmission and viral passage in human milk (De Rose et al., 2020; Salvatori et al., 2020), the knowledge about COVID-19 is changing rapidly, while health benefits of breastfeeding remain unquestionable. Herein we describe our experience at the Human Milk Bank (HMB) of a children's hospital in Rome (Italy). There are 39 HMBs in Italy, but ours is the sole bank in Rome and in the whole area of Lazio, inhabited by 6 million citizens: it offers donor human milk (DHM) not only to our critically ill infants, but also to infants of other Neonatal Intensive Care Units. Several studies have documented that the use of DHM is cost-effective (Haiden and Ziegler 2016). Donors for our HMB come from mothers whose babies are sick in our hospital (18%) and volunteering at home nursing mothers (82%) they are carefully selected and then tested for several infectious diseases, as suggested (Haiden and Ziegler 2016). Donors express milk by mechanical pumping, and store it in the freezer compartment of their home refrigerator before delivery to the HMB, always using sterile single-use plastic containers previously supplied by our bank. This is done according to current recommendations from the Center for Disease Control and Prevention during this pandemic for proper pump cleaning after each use (Centers for Disease Control and Prevention 2020). Donors are forced to remain in their residence according Italian Government mandate during the pandemic. While milk donation was practically suspended in other Italian cities (Marinelli 2020), our drivers still collect once a week the expressed human milk (EHM) directly from the donors (while we usually collect EHM 15 times/month), but without entering into the donors' residence and wearing protective equipment. In this way, without suspending HMB's activities, we collected 270 containers (49 liters) during the last 30 days. Milk was frozen and then defrosted and pasteurized before use, with pasteurization process at 62.5°C for 30 minutes (Holder pasteurization) as recommended in all international HMBs guidelines (Moro et al. 2019).

Breastfeeding information is provided to the mothers via telephone consultation available 8 hours a day. Although we recommended that donor mothers suspend donation and be promptly tested if any SARS-CoV-2 symptoms occur (and mothers agreed to avoid any contact with suspected cases), SARS-CoV-2 could contaminate the outside of the container, considering that this virus can be detected for up to 72 hours on plastic and various surfaces (van Doremalen et al. 2020). Therefore, as recently suggested in *JHL* (Marinelli and Lawrence 2020), we started to sanitize EHM containers using disinfectant wipes and gloved hands, in order to guarantee safety of our children and our workers.

Before storing containers in our HMB's freezers, we employ a ready-to-use disinfectant wipes containing 20 ml of 0.105% sodium hypochlorite (distributed by Lombarda H, Italy).We estimate that with a single wet wipe it is possible to disinfect the outside surface of 55 containers (each one with 200 ml EHM, for a total of about 11 liters) in about 15 minutes. The cost of a single wet wipe is 0.58 euros. Therefore, considering use of a single wet wipe each time we collect EHM (15 times/month before pandemic with an average of 50 collected containers/time), we calculate an additional charge of about 104.4 €/year. While the use of a diluted bleach (0.5% sodium hypochlorite, with a dilution of 1:10) is the least expensive method (Marinelli and Lawrence 2020), it is necessary to carry out the appropriate dilutions, and this could be not as easy and fast.

Struggle against this insidious virus, that changed the way we live and think, requires continuous efforts (De Rose et al. (2020); Salvatori et al., 2020). On the other hand, trying to restart our activities and ensure human milk to those who need it could help us to not change the quality of our assistance of these fragile infants.

Using wet wipes is a sustainable expense, and the extra-time used to disinfect containers is feasible, easy, and advisable.

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Ethical Disclosures

The authors declare that they have followed the protocols of their work center on the publication of patients' data and Helsinki Declaration.

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Author' Contributions

All authors participated to the conception and design of the study, acquisition and interpretation of data and drafting the article. All authors read and approved the final version.

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