Separating mothers with COVID-19 from their newborns does more harm than good

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Preventing early skin to skin contact potentially disrupts newborn physiology. Credit: John Ryan/Flickr, CC BY-SA

In several countries pregnant women confirmed or suspected to have COVID-19 are being required to have cesarean sections or be separated from their newborn babies to restrict COVID-19 transmission.

Such measures may help health services better manage COVID-19

caseloads, but what are the consequences, and how do these practices compare with evidence-based global recommendations for maternity care during the pandemic?

Changes in maternity care practices

Early in the pandemic, a private hospital in Sydney, Australia had told mothers with COVID-19 they would be separated from their babies after birth, but later apologized.

Mother-baby separation has occurred in several countries during the pandemic, including the United States (US), China and Indonesia.

Many women have also experienced forceps or vacuum during birth, induction and cesarean section, irrespective of their infectious status, and with little choice.

In April, a study reported a case of an uncomplicated vaginal birth at an Australian hospital in a mother with COVID-19, without separation and with ongoing breastfeeding.

These examples highlight the value of evidence based international guidance, such as from the World Health Organization (WHO). Released early in the pandemic and regularly updated, WHO recommendations are to encourage breastfeeding and its early initiation, placing the newborn skin to skin, and in the same room as the mother during hospital stay, after birth during the COVID-19 pandemic.

The WHO guidance was that new mothers and babies should be exempted from distancing or isolation, even if they are confirmed or suspected of having COVID-19.

The guidelines state these are safe when hospitals adhere to adequate

infection prevention and control measures.

These include:

- staff wearing full personal protective equipment, including N95 masks
- mothers wearing a surgical mask during the second stage of labor
- strict handwashing procedures and use of a surgical mask around the baby.

New research from John Hopkins University and Western Sydney University states policymakers should consider the cumulative impact of mother-baby separation.

Conserving hospital resources?

Natural childbirth is unpredictable, and scheduling it could be seen to conserve hospital resources; however childbirth does not fit easily into hospital routines, and during the current pandemic, health services have been stretched.

Midwives and nurses have reportedly been redeployed from looking after women during labor to other areas.

Hospitals can manage scarce staff and other resources better if births are scheduled and timings managed. This strategy, while seeming beneficial for hospitals, is not so for the health and safety of the mother and baby.

Some hospitals have also implemented policies preventing partners or other support people from attending the birth.

To minimize virus spread, both for health-care staff and pregnant women, some eliminated what is deemed non-essential face-to-face

hospital visits, such as antenatal classes or support persons. And some have spaced out and reduced the time of antenatal visits.

In high-income countries such as Australia and the US, telehealth is compensating for this lack of in-person support. But in many low and middle income countries, telehealth is not established. Lack of access to good internet and low health literacy are further challenges which limit the effectiveness of this medium.

Anxiety in the hospital

Some level of anxiety is quite normal for pregnant women, especially if this is their first baby, but this anxiety has been heightened by the pandemic.

With many health workers also infected, expectant mothers have experienced controversy and fear. Cutbacks in antenatal and community-based midwifery services (reported in the United Kingdom), and increased enquiries about homebirth, prompted warnings about women choosing to birth without a skilled attendant.

Medical organizations, including the Royal Australian and New Zealand College of Obstetricians and Gynecologists (RANZCOG), have issued statements of concern.

The Australian College of Midwives called for more community-based maternity services, such as clinics in empty schools and community halls and expanding access to home birthing, to reduce pregnant women potentially being exposed to the virus in hospitals.

As yet, little data is currently available to assess the consequences of COVID 19 maternity service changes.

Best practice guidelines

The latest WHO update confirms previous clinical guidance for pregnant and new mothers and newborns, including for breastfeeding.

Intervening in early skin-to-skin contact, by separating mothers from their babies, can potentially disrupt newborn physiology. UNICEF explains that early skin to skin contact calms and relaxes both mother and baby, regulates the baby's heart rate and breathing, helping them to better adapt to life outside the womb, stimulates digestion and an interest in feeding, regulates temperature, enables colonization of the baby's skin with the mother's friendly bacteria, thus providing protection against infection, and stimulates the release of hormones to support breastfeeding and mothering.

Early skin to skin contact is also vital in the neonatal unit, where it is known as Kangaroo care, as it improves oxygen saturation, reduces cortisol (stress) levels particularly following painful procedures, encourages pre-feeding behavior, assists with growth, and may reduce hospital stay.

If the mother expresses milk following a period of skin-to-skin contact, her milk volume will improve and the milk expressed will contain the most up-to-date antibodies.

Separation can also disrupt the mothers' milk production and increase their stress levels. Infant sucking and breast stimulation in the first hour after birth give rise to hormonal responses in the mother, accordingly increased oxytocin secretion to produce milk and prolactin hormone reflex for milk production. This oxytocin hormone also reduces maternal stress level.

Health organizations in several countries have published their own

recommendations based on their own data and country situation. The National Health Service in the UK, for example, recommends skin-to-skin contact and early initiation of breastfeeding after birth.

In contrast with WHO guidance, the US Centers for Disease Control strongly encourage consideration of temporary separation of mothers and babies where mothers are suspected of, or confirmed to have COVID-19. In China this has become standard practice.

Similarly, the American Academy of Pediatrics recommends breastfeeding, but supports temporary separation while acknowledging different opinions among medical experts.

In the UK the Royal College of Obstetricians and Gynecologists supports women having skin-to-skin contact with their babies after birth and to initiate breastfeeding with standard COVID-19 precautions.

Meanwhile, the Indonesian Society of Pediatrics does not allow early initiation of breastfeeding to a baby born to a mother suspected or confirmed as having COVID-19.

First, do no harm

An important question is what this disruption to quality maternity care has achieved.

Publications by Melissa Bartick, an Assistant Professor at Harvard Medical School and internist from Mount Auburn Hospital who focuses on lactation, and Alison Stuebe, an expert in infant and young child feeding from the University of North Carolina, suggest separation might delay infection, but not prevent it.

Stuebe also notes that separation of mother and newborn in the hospital

puts twice the burden on the health-care system to provide two separate sets of caregivers, protective equipment and hospital rooms.

What is perplexing is why prior planning did not identify this problem. Maternity care services are not so difficult to predict and plan for that the pandemic should disrupt quality standards so severely.

Mother-baby separation after birth, even if only temporary, where the baby is well, is not based on evidence. It brings more harm than good. Countries that apply this approach need to reconsider so mothers and babies get optimum care during and beyond the COVID-19 pandemic.

Community-based midwifery models of care can also be prioritized and expanded to protect women and babies in health care during this and any future pandemic.

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