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COMMENTARY

COVID-19: PREGNANCY AND BREASTFEEDING

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Submitted: April 2020; Accepted: April 2020

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Several cases of Severe Acute Respiratory Syndrome (SARS) were reported in Wuhan City, Hubei province, China, in late December 2019 [1,2]. The causative agent was soon identified as a novel coronavirus. It was called Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2 or 2019-nCoV) [1,2]. It is a new strain of coronavirus that has not been previously identified in humans. The disease is now referred to as Corona-Virus Disease 2019 (COVID-19) [1]. The initial outbreak in Wuhan spread rapidly, affecting other parts of China. Cases were soon detected in several other countries. Outbreaks and clusters of the disease have since been observed globally. The World Health Organisation (WHO) declared COVID-19 a pandemic on 11 March 2020 [3].

COVID-19 is transmitted from person-to-person mainly via small respiratory droplets through sneezing, coughing, or by interaction with each other for some time in close proximity. The droplets can be inhaled, or they can land on surfaces that another person may touch, then get infected when they touch their nose, mouth

or eyes. It has been reported that SARS-CoV-2 can survive on different surfaces from several hours up to a few days [1,2,4]. The incubation period for COVID-19, which is the time between exposure to the virus and onset of symptoms, has been estimated to be between 2 and 14 days [1].

The major focus of my commentary is the implication of SARS-CoV-2 for pregnant and breastfeeding women. There is limited scientific evidence on the severity of illness in pregnant women after COVID-19 infection. Available information indicates that pregnant women tend to experience similar clinical manifestations as non-pregnant women who have progressed to COVID-19 pneumonia. In addition, no published data is available to suggest that infection with COVID-19 during pregnancy has a negative effect on the foetus.

At present, there is no evidence of transmission of COVID-19 from mother to baby during pregnancy and only one confirmed COVID-19 neonatal case has been reported to date [1].

According to the European Centre for Disease Prevention and Control (ECDC), it is important

that currently all pregnant women should follow the same general precautions for the prevention of COVID-19, including regular hand washing, avoiding individuals who are sick, and self-isolating in case of any symptoms, while consulting a healthcare provider by telephone for advice [1].

Breastfeeding protects newborns from getting sick and also helps protect them throughout their infancy and childhood. Breastfeeding is particularly effective against infectious diseases [5-7]. There are numerous live constituents in human milk, including the immunoglobulins, antiviral factors, cytokines and leucocytes that help to destroy harmful pathogens and boost the baby's immune system [7].

There is currently no evidence to suggest intrauterine infection caused by vertical transmission in women who develop COVID-19 pneumonia in late pregnancy [8-10]. Presently there is also no evidence that COVID-19 can be transmitted through breast milk of COVID-19 infected mothers to their infants [8-12]. According to UNICEF the benefits of breastfeeding outweigh any potential risks of transmission of the COVID-19 virus through breast milk [7]. Breastfeeding has been recognised as the cornerstone of child survival, nutrition and development and maternal health. All health professionals should protect, promote and support breastfeeding [7,13]. However, as with all confirmed or suspected COVID-19 cases, mothers with suspected or confirmed COVID-19 who are breastfeeding or practicing

skin-to-skin contact (Kangaroo mother-care) should be isolated and appropriate precautions taken [6,7].

It is important for health professionals to advise mothers to always wash hands thoroughly with soap and water for a minimum of 2 minutes at critical times, including before and after contact with the infant. If available, the use of a face mask when breastfeeding or caring for the infant is recommended. Surfaces around the home that the mother has been in contact with should be regularly cleaned using soap and water. Mother with her infant should practice physical distancing from other people (at least 1.5 m), avoid touching eyes, nose and mouth and use cough etiquette. Mothers need to be re-assured that it is safe to breastfeed their children [14,15]. Ensure alignment with the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly resolutions as commercial companies may take advantage of this situation to try and promote their products through the health care system [16]. In situations when severe illness in a mother with COVID-19 or other health complications prevents her from caring for her infant or prevents her from continuing direct breastfeeding, mothers and families should be encouraged and supported to express breastmilk, and safely provide breastmilk to the infant, while applying appropriate hygiene measures. These include washing her hands before touching the breast pump or bottle parts and clean the breast pump

thoroughly after each use. Common areas such as kitchens should have door handles and surfaces wiped down frequently. If mother is very unwell then assistance to pump breastmilk must be provided to maintain supply and a support person can feed the expressed breastmilk to the infant. The expressed breastmilk should be fed to the child using a clean cup and/or spoon, preferably by a person who has no signs or symptoms of illness [6,14,15].

In conclusion, I am aware of the limitations of this commentary. However, as the scientific community learns more about COVID-19, more evidence about the implications for pregnancy and breastfeeding will become available. I nevertheless think this commentary is appropriate and timely for publication in Pacific Journal of Medical Sciences since there is currently a paucity of relevant published data on this topic. One major concern is that child and maternal malnutrition is currently the leading cause of maternal and child morbidity and mortality in resource limited countries like Papua New Guinea [17,18]. Exclusive breastfeeding for the first six months of life is essential for healthy growth and development of infants and for maternal health [6]. Thus, it is important that health professionals, especially in low and middle income countries, are reminded of the importance to continue to protect, promote and support breastfeeding.

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