Ensuring zero separation for a better newborn outcome

Dr Abdullahel Amaan and Dr Khainoor Zahan

The premature newborns are sometimes inevitably kept separated from their mothers for their compulsory care in the newborn-care nurseries or intensive care units. In Bangladesh's cultural trend, families and friends usually rush to adore the newborns immediately after their birth. Sometimes the newborn is kept apart from the mother to ensure her relaxed rest.

There are several harmful after-effects from such separation where skin-to-skin contact immediately after birth is tremendously beneficial. Naturally, a mothers' own body is biologically the perfect place for the best care of a newborn, irrespective of the baby being mature or premature. After a vaginal birth human brain remains most alert from the immediate rush of adrenaline. the hormone of alertness. This adrenaline rush enhances the activities of the lungs, makes the body ready to combat the new environment of the world. Following such an emergency event, a mother's affectionate touch, hug, smell play a crucial role to calm the newborn brain If the newborns are kept away from their mothers, the babies' quiet sleep is observed to be reduced by 86% and the sleep cycle is abolished as well.



In the prolonged absence of a mother's tender and comforting touch, the newborn initially cries intensely. This switches the release of growth hormone to cortisol. Cortisol diverts all the calories and other neurological resources to ensure survival at the cost of growth. The neurological findings among these separated newborns are similar to the features found among the abused children.

They initially cry intensely and subsequently enters into a 'state of freeze' when they find their

mother is not responding. At this stage, they remain absolutely still and quiet with their eyes closed firmly. This is not sleep rather is however a state of 'high arousal'. When such a state persists, a prolonged high cortisol level may initiate some harmful changes, like developing obesity, hypertension, high cholesterol levels and diabetes in later life.

On the other hand, a constant and uninterrupted physical presence of the mother helps the newborn to control all of the different physiologic

A prolonged maternal regulation helps in establishing the required neural circuits in the brain, resulting in a healthy physiological set-point. The mother's smell, contact and warmth 'fire' a pathway from the baby's amygdala to its frontal lobe, which connects the newborn's emotional and social brain circuits.

From the constant contact with her child, a mother also gets tremendous physiological benefits. The eye contact, sound, nipple stimulations – all work conditions; known as 'regulation'. together to trigger new neural

circuits in the mother, resulting in the release of oxytocin. which increases her breast milk production, as well as, reduces her postpartum uterine bleeding. It also produces a ferocity of defence of the young. The sooner the contact between the mother and her newborn can be ensured, the intense can be the benefit.

Furthermore, early suckling produces prolactin, the hormone necessary to ensure the structural changes of her breasts to its optimal milk production capability. Thus, successful breastfeeding also requires zero separation between a mother and her newborn baby.

Nowadays technology had advanced to such a level that, intensive newborn care can even be ensured by keeping the baby on its mother's chest, ensuring their togetherness and improved quality of survival.

In this pandemic era when transportation is restricted in many ways, zero separation is a potential for a better pregnancy outcome. Let us ensure the togetherness between the newborn and mother to get a better outcome.

Dr Abdullahel Amaan is a Resident at the Department of Neonatology, Bangabandhu Sheikh Mujib Medical University, Bangladesh. E-mail: abdullahelamaan@gmail.com

Dr Khainoor Zahan is a Deputy Director at the Bangladesh National Nutrition Council (BNNC), Bangladesh. E-mail: khainoorzahan@gmail.com

DID YOU KNOW?



It is common for pets to catch COVID-19 from their owners

COVID-19 is common in pet cats and dogs whose owners have the virus, according to new research being presented at the European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) held online this year.

Researchers in the Netherlands studied dogs and cats of people who had tested positive for COVID-19. Some 156 dogs and 154 cats from 196 households were tested in total. Six cats and seven dogs (4.2%) had positive PCR tests and 31 cats and 23 dogs (17.4%) tested positive for antibodies.

With pets in 40/196 households (20.4%) having antibodies for the virus, the study reveals that COVID-19 is highly prevalent in pets of people who have had the disease.

The main concern, however, is not the animals' health - they had no or mild symptoms of COVID-19 - but the potential risk that pets could act as a reservoir of the virus and reintroduce it into the human population.

Fortunately, to date, no pet-to-human transmission has been reported. So, despite the rather high prevalence among pets from COVID-19 positive households in this study, it seems unlikely that pets play a role in the pandemic.

HEALT Hulletin



Tofacitinib may be beneficial for hospitalised patients with COVID-19 pneumonia

In patients hospitalised with COVID-19, excess inflammation generally underlies clinical progression. By reducing cytokine production, Janus kinase (Jak) inhibitors tamp down inflammation. Now, investigators report results of an industry-supported trial of the Jak inhibitor tofacitinib in 289 patients in Brazil with COVID-19 pneumonia.

Progression to death or respiratory failure occurred significantly less often with tofacitinib than placebo (18% vs. 29%; risk ratio, 0.63). Death from any cause and clinical status on an ordinal scale were more favourable in the tofacitinib group, but these differences were not statistically significant. Rates of serious infections or thromboembolic events were similar in both groups.

Accumulating evidence shows that adding Jak inhibitors to corticosteroids improves outcomes in hospitalised patients receiving supplemental oxygen but not requiring mechanical ventilation. The NIH and the Infectious Diseases Society of America both endorse the use of the Jak inhibitor baricitinib in selected hospitalised patients.

Selfitis: the selfie caused mental disorder

DR MUHAMMAD TOREOUL ISLAM

Selfie is a well-known word in the modern world of social media violence. It is hard to find people in the world who use social media but never use selfies. A selfie or a self-portrait photograph is typically taken with a mobile camera (usually by smartphone) held in the hand or supported by a selfie stick. However, using more selfies causes a mental disorder called 'selfitis'.

Selfitis is an obsessive-compulsive desire to take photos by oneself and post those on social media, e.g. on Facebook to make up for the lack of self-esteem and to fill an intimacy gap. The American Psychiatric Association (APA) has officially confirmed that taking 'Selfies' is a mental disorder. According to the APA, selfitis can be classified as:

Borderline selfitis: Taking photos by oneself at least three times a day without posting them on social media.

Acute selfitis: Taking photos by oneself at least three times a day and posting those on social media. Chronic selfitis: Taking photos

by oneself more than six times a day and posting those on social media. A person with chronic selfitis generally uses social media round the clock and posts selfies on social media frequently.

Selfitis is closely related to narcissism (excessive interest in or admiration of oneself and one's physical appearance). It has been observed that people with lots of Facebook friends/fans are



more likely to be narcissists. Signs ofnarcissists may include the following:

Selfish: They may act selfishly and, even if being generous (only responsive to their own concerns). Unruly: They feel that they are

superior and they do not need to obey any rules. Inability to take criticism: They have an inflated idea of their own

importance and are quickly deflated by negative criticism. Unilateral listening: Instead of listening to respond, they listen to dismiss, negate, ignore, minimise or otherwise make someone else's

concerns irrelevant. Refuse to take responsibility: They tend to blame others for things

that go wrong. Angry: They may become easily angered by critical comments or

being ordered what to do. We should limit the use of smartphones. The high rate of smartphone usage and free internet access should be restricted among teenagers. Awareness programmes are needed to be conducted at educational institutions by making

the students aware of the severe consequences and statistical information on death and injuries due to selfies. People are always looking to

express themselves differently from others. A selfie is a great tool for this purpose. Research has shown that people who are isolated from family and society and are constantly on the lookout for smartphones are the ones who use selfies frequently. We can bring such people back to normal life by counselling them through family, social and educational institutions

Dr Muhammad Toregul Islam is an Assistant Professor of Pharmacy at the Bangabandhu Sheikh Mujibur Rahman Science and Technology University. E-mail: dmt.islam@gmail.com

Know how you can get Giardiasis

MD BILLAL HOSSAIN

Giardiasis is a common diarrhoeal disease, predominantly found at the commencement of monsoon. It is a parasitic disease caused by the parasite Giardia duodenalis, also known as Giardia lamblia and Giardia intestinalis. Giardia infects the small intestine which later causes diarrhoea. Giardia can be found in every region of the earth.

Giardiasis can be spread by swallowing food or water contaminated with giardia, having close contact with giardiasis infected person, transferring giardia germs picked up from bathroom handles, changing tables and toys.

In case of Bangladesh, giardia can be spread by swallowing water from the ponds, lakes, rivers or streams. Most of the villagers use pond or stream water for drinking, bathing and other household works. Children are the most vulnerable group to giardiasis.

The most common symptoms of giardiasis include diarrhoea, bloating, foul-smelling, greasy faeces that can float, stomach cramps or pain, upset stomach oi nausea, fever, itchy skin, hives, and swelling of the eyes and joints, and Dehydration. It also may cause weight loss. The symptoms generally begin by having 2 to 5 loose stools per day.

To prevent and control giardiasis there is no alternative to maintain personal hygiene. It is important to wash your hands before eating and preparing food and after using the toilet.

Hand washing helps to reduce the risk of getting giardiasis. Try to avoid drinking water from ponds, lakes or rivers. These water sources can be contaminated with giardia germs which may infect you and your family. Teach your children to avoid swallowing water while swimming in the ponds, lakes, rivers, streams or springs. Drink only clean and safe drinking water. Wash vegetables and fruits properly before eating. Maintain all the hygiene measures and lead a healthy life.

The writer is a student at the Department of Applied Nutrition and Food Technology, Faculty of Biological Science, Islamic University, Bangladesh. E-mail: billalanftiu@gmail.com



