Kangaroo Mother Care: Learning from nature to sustain

Dr Abdullahel Amaan, and Dr Khainoor Zahan

Annually approximately 15 million babies are born prematurely worldwide. More than one million of them die shortly after birth and many suffer from various physical, neurological, or intellectual disabilities afterwards. In Bangladesh, the neonatal mortality rate is 30 per 1,000 live births, accounting for 67% of all under-5 deaths. 19% of these deaths are from premature births.

With our societal and economic advancement, women are gradually getting more engaged in economic activities. The opportunity of living as a joint family in the big cities is also decreasing for its up-scaling expenditure. Thus, working women are entering into a more stressful lifestyle. They go through the stress of their workplace and the household as well. Studies show that women who experience high levels of stress during pregnancy have a 25-60% higher risk for premature delivery, even after accounting for the effects of other established risk factors.

During the 1970s, Colombian physicians found it difficult to treat premature newborns with their limited resources. Two Colombian physicians, Dr Edgar Rey Sanabria and Dr Héctor Martínez Gómez, observed a similar type of premature delivery among kangaroos as a natural phenomenon. The kangaroo newborn or 'joey' is usually delivered prematurely into its mother's pouch and grows up there up to a certain period



of life. Its mother's pouch provides not only the necessary warmth to prevent it from losing its body temperature, but also keeps the baby close to the breasts for unlimited feeding. The two physicians then tried to use this experience upon human newborns to curb the overcrowded and inadequate resources in neonatal intensive care units. They started to place the premature newborn naked (except for a diaper, hat, mitten and socks) on their mother's uncovered chest ensuring skinto-skin contact and got beneficial results. This procedure helped them to reduce the congestion in incubators. They named it 'Kangaroo Mother Care (KMC)'. After several scientific trials and validation, the World Health Organisation has accepted KMC as a standard of care to decrease morbidity and mortality among premature newborns.

Premature newborns are at higher risk for heat loss because of their lack of a protective fat layer under their tender skin where temperature regulation plays an important role in their survival. The kangaroo position utilises the mother's body heat to maintain the newborn's body temperature. It has been further proven that the touch, light pressure and warmth of the newborn enhance the release of oxytocin, a hormone of multifaceted benefits.

Oxytocin causes dilatation of the blood vessels of the mother's chest resulting in increased blood supply which helps to provide more warmth to the premature newborn. Oxytocin results in flushing of the mother's chest and starts to pulse in response to skin-to-skin contact with the newborn. As a result newborn's skin temperature rises and reduces the risk of life-threatening hypothermia. It enhances the availability of breast milk by increasing its enhanced ejection. Oxytocin augments necessary digestive hormones in the newborns which optimises their digestion and metabolism for their optimal growth and ultimately early discharge from hospital. It also contributes to decreasing postpartum bleeding, anxiety and enhanced wound healing ultimately leading to a quicker return to prepregnancy weight of the mother.

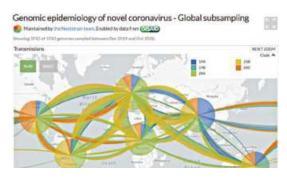
While giving kangaroo care, a mother can learn the various ways of nurturing a premature baby by being close to the nurses and doctors which helps to boost her confidence to take care of the baby at home. The process also contributes to optimising a trend of 'family-centred care' of a newborn which is a holistic way of bringing a positive pregnancy outcome.

To adopt a behaviour and make it a practice, awareness building with frequent reminders are necessary. Decision-makers of the family and healthcare workers at all levels need to get repeated reminders regarding the benefit of KMC to make it a common practice. Electronic, print and mass media, development partners, etc. as part of their social accountability, can play an important role in promoting such health awareness practices among the mass people.

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

COVID SEQUENCING



Inadequate sequencing of SARS-CoV-2 variants impedes global response

The lack of sequencing of SARS-CoV-2 variants is imperilling the global response to the COVID-19 pandemic, argues Dana Crawford of Case Western Reserve University in a new Viewpoint published recently in the journal PLOS Genetics.

Surveillance is essential to a successful and rapid response to disease outbreaks, but public health surveillance has traditionally focused on monitoring case numbers, hospitalisations and deaths. Advances in genome sequencing now allow us to track genetic variation in evolving viruses in unprecedented detail.

Crawford cites insufficient funding, the lack of an effective sample tracking system and strict regulations on sample and data sharing as the causes of the inadequate sequencing efforts. She cautions that investments in SARS-CoV-2 genomics need to continue and expand as new variants will likely arise due to variability in vaccination rates and adherence to COVID-19 precautions worldwide.

Crawford concludes that ongoing international sequencing efforts are still needed to understand and respond to this continually evolving virus that knows no international boundaries.

H E A L T H bulletin



Poorer people less likely to be tested for SARS-CoV-2, more likely to be hospitalised, enter ICU and die

Evercare Hospital Dhaka committed to providing end-to-end quality patient care

The Star Health recently was in a conversation with Dr Sanjay Kisanrao Pathare, Director – Medical Services and Mr Kaiser Chowdhury, Director – Human Resources at Evercare Hospital Dhaka. Here is a snapshot for the readers.

Star Health: What unique facilities does the Evercare Hospital Dhaka provide?

Dr Sanjay: Evercare Group is a leading impact-driven healthcare company that operates in South East Asia and Africa. We have 30 hospitals, 16 clinics and 82 diagnostic centres. In Bangladesh, we have two hospitals located in Dhaka and Chattogram. Evercare Hospital Dhaka is 16 years old with a rich legacy of high-end clinical care. It is the only hospital in Bangladesh accredited by the Joint Commission International (JCI) five times in a row, which means we care about end-to-end quality patient care from admission to discharge. We have high-end services, starting from internal medicine, high-end cardiac services, in vitro fertilisation (IVF) and women care, haematology with bone marrow transplants and oncology services to name a few.



Evercare believes in having a diverse workforce who understands the broader array of patient segments. 47% of our total workforce comprises of female employees, reflecting our strong focus on diversity and inclusion. For sourcing of international physicians, we take support from our agencies along with our own sourcing channels. We use our own network, social media, company website, and job sites for sourcing local talents. Star Health: What specialities are offered for clinical and non-clinical candidates? Dr Sanjay: There are around 52 specialities available for candidates under the clinical wing including internal medicine, general and laparoscopic surgery, gynaecology and IVF, oncology, gastroenterology, cardiac sciences, paediatric services etc. Mr Kaiser: Evercare Hospital Dhaka is a great place to work where there is enormous opportunity to learn new things everyday as we are going through various transformation and change management. People usually perceives this as a place to receive medical treatment only but there are also various non-clinical functions like finance, human resources,

operations, hospitality, information technology, medical administration and facility management etc. where a person can join and grow with the organisation.

Star Health: Where does Evercare Hospital see itself in the next few years?

Dr Sanjay: We have ambitious plans of adding complex medical programmes and technology. For example, the country has no sustainable liver transplant programme, so we want to develop a robust programme in the next few years. We are the only hospital in the country having a bone marrow transplant programme and now



Alcohol consumption linked to more than 740,000 new cancer cases in 2020

Four percent of newly diagnosed cancer cases in 2020 may by associated with drinking alcohol, according to a global study published in The Lancet Oncology, leading its authors to call for greater public awareness of the link between alcohol and cancers and increased government interventions to reduce alcohol consumption in worst-affected regions.

The study estimates that men accounted for 77% (568,700 cases) of alcohol-associated cancer cases, compared with women, who accounted for 23% of cases (172,600). Cancers of the oesophagus, liver, and breast accounted for the largest number of cases.

New research from Switzerland presented at this year's European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) shows that people living in poorer neighbourhoods were less likely to be tested for COVID-19 but more likely to test positive, be hospitalised, or die, compared with those in more wealthy areas.

Comparing the highest with the lowest Swisssocioeconomic position (SEP) group and using the general population as the denominator, those in the wealthiest SEP neighbourhoods were 18% more likely to be tested for SARS-CoV-2 than those in the poorest. And, compared with the poorest neighbourhoods, those in the wealthiest neighbourhoods were 25% less likely to test positive, 32% less likely to be hospitalised, 46% less likely to be admitted to the ICU, and 14% less likely to die.

In this whole-population study of the COVID-19 epidemic in Switzerland in 2020-21, researchers found that people living in wealthier areas were more likely to get tested for SARS-CoV-2 but less likely to test positive and be admitted to hospital or the ICU, and less likely to die, compared with those in poorer areas.

Governments and health-care systems should address this pandemic of inequality by taking measures to reduce health inequalities in their response to the SARS-CoV-2 pandemic. **Star Health:** How are Evercare Hospital's talents found? What kind of recruitment process does the hospital follow?

Mr Kaiser: In healthcare, talent acquisition can be a life-ordeath issue where incompetent resources may lead to unfavourable consequences. At Evercare Hospital Dhaka we ensure that, we have a credible and competent team managing the talent acquisition. we are ramping it up. We are also developing a bariatric programme and comprehensive stroke centres in our hospitals in Dhaka and Chattogram. We have recently started a heart failure clinic that is one of its kind in the country. We are revamping our complete critical care facilities by adding new technology and talents. We are also updating our kidney transplant programme with a full-time clinical team.

Mr Kaiser: We are automating people processes and have partnered with world-class human resources information system solutions. We are also building performancecentric culture and encourage accountability in all operations. As the industry is changing, we will look for more innovative thinkers who can see the connection between different roles and specialties to provide an innovative and integrated approach towards treating illness and solving organisational problems. It is estimated that in 2020, there were more than 6.3 million cases of mouth, pharynx, voice box (larynx), oesophageal, colon, rectum, liver, and breast cancer. These cancers have well-established causal links to alcohol consumption, and the estimates of the direct associations with alcohol in the new study are the first of their kind for 2020. Disruptions to health care and cancer services across the world due to the COVID-19 pandemic are likely to have affected diagnosis rates for that year and may have led to an underestimation of new cancer cases in the recorded data.

Raising awareness about the link between alcohol consumption and cancer risk among policymakers and the general public is urgent. Public health strategies, such as reduced alcohol availability, labelling alcohol products with a health warning, and marketing bans could reduce rates of alcohol-driven cancer. Local context is essential for successful policy around alcohol consumption and will be key to reducing cancer cases linked to drinking.





Breathe Deep, Breathe Clear

Breathe In Breathe Out – this simple task gets complicated in respiratory distress. Proper diagnosis is required to treat your breathing difficulties.

United Hospital Respiratory Lab

- Spirometry
- Spirometry + Reversibility
- FeNO (Fractional Exhaled Nitric Oxide)
- DLCO (Diffusing Capacity of the Lung for Carbon Monoxide)
- BPT (Bronchial Provocation Test) or Bronchial challenge test with methacholine
- Bronchoscopy

Ready to serve you with all the modern equipment for the Pulmonary Function Tests