Experts' Comments on World Prematurity Day

A roundtable on World Prematurity Day was held recently at The Daily Star with the support of Save the Children. Distinguished speakers deliberated on the issue and put forward some important recommendations for adoption by the policy makers in their efforts to reduce the rate of preterm deaths in the country. Highlights of the discussion are given below.

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Prof Dr. Mohammod Shahidullah, President of Bangladesh Paediatric Association, in his introductory remarks said the World Prematurity Day was being observed all over the world. We all know that there are three main reasons responsible for death of all the newborn. Preterm birth complication is the number one reason responsible for the high rate of death of the newborn.

Keynote speaker Dr. Sayed Rubayet, Director, SNL program, Save the Children: As we mark the Day, 15 million children are born globally. Unfortunately, of them one million children die because of complications arising from preterm birth.

Bangladesh ranks seven among top ten countries of the world on account of premature birth; and the U.S. is at 6th position. It is not the problem only for developing countries, rather it is a global problem. We have to combat the problem through a combined effort. The highest rates of such deaths have been recorded in India and Pakistan. About 45 percent of global preterm deaths are reported from these two countries. Here in Bangladesh, we are failing to raise the survival rate of the premature births. If a child is born before 37 weeks of pregnancy, it is considered as premature. We have proven technologies that can help survival of 75 percent of the prematurely born babies in Bangladesh. In 2014, an estimated 438,800 children were born prematurely in Bangladesh. This year, according to UNICEF estimate, 23,600 babies might die due to complications from premature birth. In 2014, we found that prematurity was the number one cause of under-5 mortality. According to WHO, 14 percent of the children born in this country is premature, which means one premature birth out of seven. With this comes low birth weight. Weight below 2.5 kilograms is considered low birth weight. The number of extreme premature, born before 28 weeks, has been estimated at 22,000 a year. These babies are considered as extreme pre-term and need extensive healthcare support.

According to a Bangladesh Demographic Health Survey in early 1990, neonatal mortality rate was 52 per 1,000 live births and this number has now been brought down to 28, an achievement taking nearer to MDG goal in the area. It has to be brought down to below 12 per 1000 live birth as per commitment of Sustainable Development Goal (SDG) by 2030. After the neonatal period – from one month to 11 months – the rate of mortality found during the first survey was 35 per 1,000 live birth; and now it has come down to 8 per 1000.

There are four reasons behind child mortality. Of them, three are easily preventable. They are prematurity related complications, intrapartum related death, especially the birth asphyxia, and infection. Some 70 percent of the mortality is caused by these three neonatal problems. The fourth reason is congenital problem. Under the circumstances, without a major push there cannot be reduction in premature deaths and thus achieving the SDG goal by the year 2030 will be difficult.

We do not know the actual reason behind the premature birth of a child. But we know that there are some risk factors responsible for premature birth. They are adolescence pregnancy, short birth spacing between two pregnancies, hypertension, obesity, sexually transmitted infectious disease and history of prematurity, tobacco use, pollution, especially caused by cooking inside the living area. This means there are four categories of risk – lifestyle related risk, infection related risk, nutrition related risk and conception or pregnancy related risk.

The rate of prematurity can be lowered if we can bring changes in life style, ensure infection prevention and early treatment of infection, pay attention to proper nutrition, prevent malnutrition and ensure management in timing and spacing between pregnancies. Early pregnancy is a big problem in Bangladesh. The main cause for which the prematurely born babies die is respiratory distress syndrome and others like congenital malformation.

If we talk about cost-effective proven prevention, then we must ensure thermal care, breastfeeding and shifting to hospitals. At hospitals arrangements should be made for Kangaroo Mother Care, oxygen therapy and neonatal care. Other advanced cares include ventilation. If we can put in place proper management then 75 percent of the deaths can be prevented.

Professor Dr. Abid Hossain Mollah of BIRDEM : Our concern at the moment is prevention of under-5 premature deaths. There are specific interventions and the Bangladesh Government has been adopting them. These are Kangaroo Mother Care, administering of 7.1% chlorhexidine, breastfeeding and use of simplified antibiotics. These have been adopted, but there has not been any audit on the programme at the field level. If we can audit and ensure supervision of the programme, we will be able to prevent neonatal deaths, particularly of the preterm babies.

Joby George: 2016 has been a landmark year for newborn, especially the preterm. We have seen lots of progress. That has been made in term of introducing and scaling up of Kangaroo Mother Care, and it is no longer limited to one or two national level facilities. We have it in district and sub-district hospitals. And hopefully, we will take it soon to national level. I think there is an opportunity before us to make sure all the preterm interventions, particularly the KMC, are very well fed into sector programme, operational plan and budget. The development partners are here to support and make sure that those interventions actually going down and not just limited to tertiary level hospitals. The biggest challenges we are facing are the shortage of staff and the issue of mindset. Despite rounds of training the doctors and nurses do not see it as a priority.

Prof. Rowshan Ara Begum President Obstetric and Gynecological Society of Bangladesh (OGSB): "Stop Early Marriage" should be the only slogan. What should be done for prevention? There are incidences of premature birth. Many mothers are coming with malnutrition and that they do not have antenatal care. They are giving birth without proper spacing. The adolescents are not coming to take contraceptives. Recently we have come up with a programme on long acting reversible contraception. In February, we have taken up a programme to make the labour room a friendly place. The homes, where 63 percent delivery is performed, should be taken into account. We have prepared a protocol, whereby it is decided that we visit homes and tell the mothers about how a labour room should look like.

Dr. Pabitra Kumar Sikder, Deputy Director and Program Manager, MNH, Directorate General of Health Services (DGHS): We all know that adolescence pregnancy accounts for one third of the total pregnancies. And this is responsible for deaths of mother and preterm babies. If we can work in cooperation with the ministries and development partners we will hopefully resolve the problem. We have to ensure that the pregnant mothers come to service centres. The nurses should be given a six-moth training on midwifery. We need 20,000 midwives.

Prof T.A. Chowdhury of BIRDEM: We do not know the causes of prematurity in more than 50 percent cases. It will be ambitious to think of reducing prematurity by birth-spacing and improving nutrition. These are the necessities; and there is no doubt about it. The preventive measures that we know will be adopted. But still prematurity is going to stay. You have said about 63 percent babies getting birth at village homes and also bringing them to institutions, where facilities are many and services are better for delivery. But the question is what shall we do during the interim period? Premature babies are still being born in villages. What we need to do is disseminate proper messages. There will be prematurity but we must ensure that there are preventions against damage and deaths.

Shahida of BIRDEM : We face difficulties while nursing the newborn. It is a great thing if we find the mother physically and mentally healthy. After the babies are born we talk to mothers and relatives, but we fail to motivate them. It does not work. I think the motivation process should begin much ahead of childbirth. It is good if we could do it during the antenatal period. And if we do the counseling it will prove to be better.

Professor Abdul Mannan, Chairman of Neonatology Department, BSMMU: Kangaroo Mother Care is such an intervention that costs almost nothing. It needs only motivation and behavioral change. It is a tested procedure. The reasons that are responsible for death of newborn are hypothermia, hypoglycemia and infection. We can offer solutions to these problems through intervention and this can be done at the facilities and at homes.

Professor Mahbubul Hoque of Shishu Hospital : There are two important aspects here. One is prevention and the other is management. I think prevention to delivery procedures is difficult. But, it is good if we can perform the management after the delivery. Doctors should be brought under training programmes.

Farida Begum of UNFPA: A new category of midwifery professionals entered the health system in 2015. We have taken 500 from the government and 170 from Brac. We are giving internship to 470 others with UNFPA support. The new professionals are doing advocacy in the community. They should be used and nurtured for the betterment of health system.

Care of Pre-term Birth Babies

Prof. M.A.K. Azad Chowdhury
Dhaka Shishu Hospital

A preterm low birth weight (LBW) baby is comparable to a malnourished baby who is an easy prey to other mortality factors like asphyxia, hypothermia, infections, metabolic problems, hemorrhage, etc.

Timely establishment of breathing, keeping warm in hygienic way and initiation of feeding, preferably breast feeding are the essentials at birth. Although in an institutional setting it is not very difficult but the problem is with the vast majority being born in the rural homes. A simple methods called Kangaroo Mother Care (KMC) which is basically skin to skin contact care with the mother's chest (or any other family member, if necessary) has been proved to improve the survival and benefit the preterm in various ways.

Kangaroo Mother Care (KMC) is a special way of caring for the preterm or Low birth weight infants where baby is kept in skin to skin contact with the mother and breastfed exclusively.

What is Kangaroo mother care (KMC):Early, prolonged and continuous skin-to-skin contact between a mother (or a family member) and her low birthweight infant, both in hospital and in home after early discharge, until at least the 40th week of post-natal gestational age, with ideally exclusive breastfeeding and proper follow-up. KMC is a powerful and easy to use method to promote the health and well-being of

• Low birth weight (LBW) - infants with birth weight below 2000g
• Prematurenewborns -with gestational age less than 37 weeks

The Components of KMC

Kangaroo position

• Skin-to-skin on the mother's chest
• Secured with a wrap

Kangaroo nutrition

• Exclusive breastfeeding or feeding with breastmilk

Kangaroo discharge

• Mother continues KMC practice at home after discharge

Kangaroo Support

• Health care staff provide support to the mother to take care of her infant in the hospital
• Family support of mother in practicing KMC at home

Benefits of KMC

KMC is beneficial to babies, mothers and hospital. Several Studies evaluated the effect of KMC on:

•Mortality reduction
• Temperature control
• Breast-feeding
• Weight gain
• Infections
• Neurodevelopment
• Duration of Hospital stay and Cost

Prevent Deaths from Preterm Births

By **Joby George,** Chief of Party, Maternal and Child Health Integrated Program

NEWBORNS are one of the most vulnerable people, especially so when they are born prematurely. Prevention and management of preterm births are crucial to ensuring a safe and healthy start to life and a wise investment for our human capital development.

In Bangladesh, much is already being done to prevent preterm birth and low birth weight and to improve outcomes for small babies. Bangladesh can do a lot more to prevent preterm births by investing in interventions that reduce risks of preterm birth associated with lifestyle, infections and malnutrition during pregnancy, and lack of contraception. Improving the health and nutrition of adolescent girls and pregnant women should be another priority. More effort is also needed to identify women at risk of preterm labor and support them to give birth in a health facility that can offer extra care when needed.

Appropriate and timely care for women in preterm labor and care for babies born prematurely are also equally important. Let us ensure that women deliver in facilities with assistance from qualified staff, especially midwives or other skilled birth attendants trained to care for women in preterm labor and the provision of essential newborn care.

Caregivers must learn to identify sick and small newborns and provide them with special care such as skin-to-skin contact. Most of the babies born too soon do not need intensive care to survive. Essential newborn care, such as drying, warming, immediate and exclusive breastfeeding, hygiene and cord care, as well as basic care for feeding support, and management of infections and breathing difficulties can mean the difference between life and death for small babies.

It is high time that our society pays greater importance to ensuring a safe and healthy start to all babies, including the born too early and too small, so that they can build a healthy and productive future.

Life-Saving Intervention for Preterm Babies is Expanding in Bangladesh

Sohrab Hussain, Wahida Siraj and Ziaul Ahsan, SNL, Save the Children in Bangladesh

Mossammat Nipa, age 18, gave birth to her first child, Omar, eight weeks early in Khoksha hospital in Bangladesh's Kushtia district. Although he weighed just 1,740 grams (3.8 pounds), Omar's doctors determined he was clinically stable. To help Omar get through the dangerous first days, the attending doctor and nurse introduced the concept of kangaroo mother care, or KMC. They explained to Nipa the importance of keeping the baby in skin-to-skin contact and feeding exclusively with breastmilk. Nipa and Omar were shifted to the KMC corner of the hospital to practice the technique.With the help of Senior Staff Nurse Konica Rani, Nipa placed Omar on her chest in the KMC position. This ensured that the tiny baby would be warm and able to feed comfortably. Nipa's mother and mother-in-law were allowed to stay with Nipa in the hospital. They supported her by helping keep the baby in the KMC position, allowing Nipa to do essential activities as well as get some rest.

After 10 days, Nipa and Omar were discharged, but Nipa continued to provide KMC to Omar. She returned to the hospital for follow-up care four times but continued KMC until Omar began squirming out from her chest on his own.

Four months after leaving the hospital, Omar and Nipa are now healthy and at home, with Omar weighing 7 kg (15.4 lbs). Nipa said, "I feel great [about KMC] because Omar is now well," adding, "I definitely will advise my neighbors to go to the hospital to have KMC if their babies are born small."

Nurse Rani said, "I am happy because I am now capable to give KMC service. Earlier we could not save lives in such cases. All babies here who have received KMC have remained well and healthy." The hospital's medical officer, Dr. Sudip Kumar Dey, added, "We used to refer [such cases] to the higher level hospital, [but] now we can provide services here."

Each year an estimated 400,000 mothers in Bangladesh deliver preterm babies, and just over 30 percent of all neonatal deaths in the country are due to complications of preterm birth. Yet most of these deaths are preventable with interventions like KMC. Four month old Omar. The Khoksha Upazila Health Complex where Omar was born is a 50-bed hospital in Kushtia district. Its 15 doctors, 12 nurses, and number of paramedics provide a range of health services. However, until recently there were no options for preterm newborns, so they were referred to Rajshahi Medical College Hospital, which was not always accessible because of distance, cost, or other factors. Now with the ability to provide immediate care to preterm babies, Khosksha is helping Bangladesh meet its commitment to reducing neonatal deaths and giving all babies a healthy start to life.

KMC is an evidence-based and highly effective intervention to manage low birthweight or preterm babies. The continuous skin-to-skin contact between the newborn and the mother (or other family members) helps the baby maintain warmth, facilitates breastfeeding, helps prevents infections, and strengthens the child-parent bond.