Publication of All India Institute of Hygiene & Public Health, Kolkata.

News and Events

Public Health Updates

Compiled by: Dr. R. N. Sinha*

WHO and UNICEF issue new ten-steps guidance to promote breastfeeding in health facilities

WHO and UNICEF launched the Baby Friendly Hospital Initiative (BFHI) in 1991 to motivate health facilities providing maternity services throughout the world to implement the Ten Steps to Successful Breastfeeding to protect, promote and support breastfeeding. The BFHI has been implemented in almost all countries in the world, with varying degrees of success.

After 25 years of launch of BFHI, overall coverage at the global level remains very low. A recent WHO Publication (National Implementation of the Baby-friendly Hospital Initiative, 2017)¹, as per available data from 168 countries as of 2016, reveal that only 10% of infants in the world were born in a facility currently designated as "Baby-friendly". Percentage of BFHI designated hospitals varies widely by region, from over 35% in the European region to less than 5% in Africa and Southeast Asia. Though 71% of the countries reported to have an operational BFHI programme (as of 2016-17), only 43% of the countries reported that at least some of the Ten Steps had been incorporated into national quality standards for maternal, newborn and child healthcare. India shows a poor BFHI status in that report. Column showing reported Percentage of BFHI designated hospitals and maternities in India [Appendix -2 of the

*Director Professor (Public Health)
Department of Maternal & Child Health
AIIH & PH, Kolkata

E mail: rabindranathsinha57@gmail.com

WHO Publication] shows no information and reported % of births in designated hospitals and maternities is shown as 0.0.

In recent years, the World Health Organization and the UNICEF have conducted the muchneeded process of re-evaluation of the strategies and guidelines to address the issues and
challenges related to successful implementation of BFHI. Revised Ten Steps to Successful
Breastfeeding have been issued in April 2018² which is based on the WHO guidelines, issued
in November 2017, titled *Protecting, promoting and supporting breastfeeding in facilities*providing maternity and newborn services³. The topic of each step is unchanged, but the
wording of each one has been updated in line with the evidence-based current guidelines and
global public health policy.

The steps are subdivided into (i) Critical management procedures: the institutional procedures necessary to ensure that care is delivered consistently and ethically; and (ii) Key clinical practices: standards for individual care of mothers and infants. Revised guidelines are as follows:

Ten Steps to Successful Breastfeeding (Revised 2018)

Critical management procedures

- 1. a) Comply fully with the *International Code of Marketing of Breast-milk Substitutes* and
 - relevant World Health Assembly resolutions.
 - b) Have a written infant feeding policy that is routinely communicated to staff and parents.
 - c) Establish ongoing monitoring and data-management systems.
- 2. Ensure that staffs have sufficient knowledge, competence and skills to support breastfeeding.

Key clinical practices

3. Discuss the importance and management of breastfeeding with pregnant women and their families.

- 4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.
- 5. Support mothers to initiate and maintain breastfeeding and manage common difficulties.
- 6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.
- 7. Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.
- 8. Support mothers to recognize and respond to their infants' cues for feeding.
- 9. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.
- 10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

References:

- 1. World Health Organization; National Implementation of the Baby-friendly Hospital Initiative, Geneva: World Health Organization; 2017
- 2. World Health Organization; Ten steps to successful breastfeeding (revised 2018) accessed from http://www.who.int/nutrition/bfhi/ten-steps/en/
- 3. World Health Organization; Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services the revised Baby-friendly Hospital Initiative. Geneva: World Health Organization; 2018.

Acute Encephalopathy?

Compiled by: -: Dr. Madhumita Bhattacharyya *

Litchi, the sweet and delicious fruit - can it be responsible for

death of children?

Acute Encephalopathy?

Since 1995 seasonal outbreaks of acute neurological manifestations and death (unexplained)

was reported from the largest litchi fruit cultivation area of India-- Muzaffarpur ,Bihar. The

outbreaks were reported during the months of litchi harvesting season i.e, in the month of May

and June. Many children of labourers consume the fruits as it falls to the ground, who used to

skip their evening meals.

The affected children who were from poor socioeconomic status presented with acute seizure,

altered mental status and mostly with onset of symptoms in early morning. The mortality rate

was very high.

Many causes had been proposed initially including infectious encephalitis, exposure to

pesticides, heat stroke and a probable association with Litchi fruit intake.

The investigators conducted investigation on 2013 and suggested that hypoglycaemia of toxin

origin, might be an important factor for the cause of the neurological manifestations. Previous

case reports and studies also found the association of acute neurological illness and

consumption of Litchi fruit or same type of fruit in Jamaica which is known as "Ackee".

* Senior Medical Officer

Department of Maternal & Child Health, AIIH&PH, Kolkata

e-mail – madhumita57@yahoo.co.in

Litchi and Ackee (botanically similar family with Litchi) contains hypoglycin and Methylene cyclo propyl glycine (MCPG) are known to cause hypoglycaemia by inhibiting beta oxidation of fatty acids and gluconeogenesis.

Investigations & Research:

An article which was published in Lancet 2017 by srivastav A, Kumar A et al is probably the largest investigation of the Muzaffarpur outbreak and the first comprehensive confirmation that this recurring outbreak illness is associated with Litchi consumption and toxicity from both hypoglycin and Methylene cyclo propyl glycine (MCPG). The investigators confirmed that both of the above mentioned toxins are present in the Litchis and their data also showed the presence of metabolites of these toxins in human biological specimen as well as the impact of these toxins on human metabolism and the modifying effect of lack of an evening meal on the impact of these toxins.

In this hospital based study, cases were children who are aged 15 years or younger and who were admitted to two hospitals in Muzaffarpur with new-onset seizures or altered sensorium. For their research, they considered 390 patients who came for the treatment in those two hospitals in Muzaffarpur between May 26 and July 17, 2014. Out of whom, 122 (31 per cent) died. Most of the children were undernourished. Clinical specimens (blood, cerebrospinal fluid, and urine) and environmental specimens (litchis) were tested for evidence of infectious pathogens, pesticides, toxic metals, and other non-infectious causes, including presence of hypoglycin A or methylene cyclo propyl glycine (MCPG), naturally-occurring fruit-based toxins that cause hypoglycaemia and metabolic derangement. Tests for infectious agents and pesticides were negative whereas metabolites of hypoglycin A and MCPG was detected in laboratory specimens. The researchers found that Litchi consumption is associated with this encephalopathy and the absence of an evening meal significantly modified the effect of eating litchis on the disease.

It has been also found that those naturally occurring fruit based toxins are found in very high amount in unripe litchi than ripe one.

Recommendations:

The recommendation for prevention of this acute litchi encephalopathy illness and death is to minimise litchi consumption and to ensure the intake of an evening meal and implementing rapid glucose correction for suspected illness.

References:

- 1. Srivastava A,Kumar A,Thomas J D et al. Association of acute toxic encephalopathy with litchi consumption in an outbreak in Muzaffarpur,India,2014:acase-control study. LancetVol5(4)April2017,458-466.
- 2. Mathew L J,John J T. Exploration of association between Litchi consumption and seasonal acute encephalopathy syndrome. Indian Pediatrics, 2017 vol54 (4)319-325