Awareness Campaign about Perinatal Asphyxia In Brazil



1) Background:

ENTITIES UNITED TO RAISE SOCIETY AWARENESS IN BRAZIL ON THE PREVENTION AND TREATMENT OF PERINATAL ASPHYXIA

Perinatal asphyxia is the third leading cause of neonatal mortality in Brazil, 23% of newborn mortality worldwide, a leading causes of Neonatal brain injury and long term neurocognitive impairment and cerebral palsy. It is estimated that approximately 20 thousand infants per year suffer from significant hypoxic-ischemic encephalopathy (HIE) in Brazil.

In Brazil, the profile of childhood illnesses changed dramatically between 1990 and 2015. Improvements in the country's sanitary and nutritional conditions, with the organization of the public health system, and the impact of specific actions such as rehydration oral therapy and immunoprevention strategies, reduced morbidities and mortality associated with infectious and immunopreventable diseases which brought neonatal issues to the leading causes of morbidities and mortality in the first 5 years of life.

One of the factors for the significant reduction made in the incidence of asphyxia between 1990-2015, a period corresponding to the millennium goals, is due to advances made in Brazil in the coverage of prenatal care. However, many challenges remain to be overcome. Some of those include investing in networked perinatal care, integrating primary health care with specialized outpatient care and hospital care, risk stratification of pregnant women based on prenatal risk factors in correlation to childbirth, and promoting the health of pregnant women, fetus and newborn. Strengthening perinatal care network with equal and longitudinal attention to pregnancy, neonatal period up to early childhood is a strategy that needs to be prioritized in Brazil.

Mitigating risk factors and complications related to pregnancy, birth and the neonatal period, which are generally preventable through integrated care between maternal and child health is possible and can change these children's and their families lives. Adequate interventions need to be identified and prioritized! Specific intersectoral and health public policies must be developed and implemented to reduce the complications of pregnancy, childbirth and postnatal period.

The quality of care provided to at-risk newborns, which require intensive and specialized care, should also be the focus of public policies.

The work of the Neonatal Resuscitation Program of Brazilian Society of Pediatrics, which established in 1994 and trained thousands of health professionals throughout the country, stands out. In 2018, the Brazilian Society of Pediatrics also launched the *Nascimento Seguro* (or "Safe Birth") campaign, which aimed to raise awareness through information directed to multidisciplinary teams, families and pregnant women on the importance of the quality and integration of prenatal care, childbirth, birth and neonatal period, and the presence of a

pediatrician in the newborn care team as early as during pregnancy, during delivery and the neonatal period.

Neuroprotection strategies such as therapeutic hypothermia and brain monitoring have been implemented in Brazil with significant heterogeneity at several levels of management. It is estimated that less than 5% of infants with HIE in the country will receive the treatment accordingly to the validated international protocols (including adequate neurological exam, proper temperature control, brain monitoring and seizures diagnosis and treatment, access to brain imaging and adequate follow up). A National Task Force to provide proper education and training across Brazil with referral of eligible neonates to centers capable of providing the level of care required for this therapy would be an important step forward.

In order to further enhance the attention to the prevention and treatment of perinatal asphyxia, national entities have joined together to launch the *Setembro Verde Esperança* - National Awareness Campaign on Birth Asphyxia — to endorse the importance awareness of risks, prevention and treatment of perinatal asphyxia.

The movement was initiated by the Protecting Brains Saving Futures Institute, a non-profit organization led by a group of healthcare professionals concerned with the high number of babies at risk of living with neurological impairment due to brain injury in the neonatal period. They collaborate on this campaign closely with fundamental partnership of the Brazilian Society of Pediatrics.

In addition, this campaign granted the support of Association for Assistance to Disabled Children, Jô Clemente Institute, Brazilian Academy of Pediatrics, Brazilian Society of Child Neurology, Brazilian Federation of Gynecology and Obstetrics Associations, Brazilian Association of Physical Medicine and Rehabilitation, Brazilian Society of Pediatric Neurosurgery, large communities of health professionals, in addition to several Brazilian hospitals. Furthermore, this project received support from Ministry of Health in Brazil which will participate in the discussions through online sessions. As a gesture of support, the national congress will be illuminated in green in allusion to the campaign between September 25th and 30th. The movement's goal is to launch a series of actions that bring this topic to the heart of discussion of the whole society.

The strength of this partnership comes from the joining forces to implement strategies to reduce relevant and preventable risk factors of diseases and deaths related to the perinatal period to achieve attainable results in our country's socioeconomic condition. The rates of perinatal asphyxia and infant mortality, despite having decreased, are still high, with preventable causes related to pregnancy and childbirth and childbirth. Specific intersectoral and health public policies must be put in place and improved to increase the reduction in perinatal asphyxia and infant mortality rates in Brazil.

2) Leadership and support of this awareness campaign?

The movement was initiated by the Protecting Brains Saving Futures Institute in Partnership with Brazilian Society of Pediatrics

Support from multiple entities in Brazil including:

a) Association for Assistance to Disabled Children (in Portuguese "AACD"), is a Brazilian non-profit association, founded in 1950, based in São Paulo, which aims to

- treat, rehabilitate and reintegrate children, adolescents and adults with physical disabilities into society;
- b) Jô Clemente Institute, a non-profit Civil Society Organization that prevents and promotes the health of people with intellectual disabilities, supports their social inclusion, focuses on defending their rights, producing and disseminating knowledge;
- c) Brazilian Society of Infant Neurology;
- d) Brazilian Association of Physical Medicine and Rehabilitation;
- e) Brazilian Society of Pediatric Neurosurgery;
- f) Brazilian Academy of Pediatrics;
- g) Multiple hospitals over different regions of the country;
- h) Neonatologia Brazil group: closed social media group called specifically created to disseminate knowledge about neonatal care in the country with over 19,000 participants;
- i) Microsoft;
- j) International support including teams from the Neuro NICU at Stanford University School of Medicine, US; Cambridge Centre for Perinatal Neuroscience, UK; Team from Imperial College London, UK and Prevention of Epilepsy by Reducing Neonatal Encephalopathy (PREVENT) Study, India; HOPE for HIE, US;
- k) Over 60 other different entities concerned with this topic in Brazil.

This awareness campaign also has support from Ministry of Health in Brazil who will have participants in online sessions and discussions promoted by the campaign.

3) Objectives:

The main objectives of this campaign are:

- Uniting supporting institutions with the aim of sensitizing society that Perinatal Asphyxia is a serious public health issue;
- Draw the attention of the public and private sectors to the need to reduce the impact of perinatal asphyxia and HIE in Brazil;
- And by reducing the chances of neurological impairment in infants we aim to change life stories of thousands of children and their families.

4) Actions promoted by this awareness campaign:

- a) Website development (<u>www.setembroverdeesperanca.com.br</u>)
- b) Series of free webinars and online sessions (please find program attached)
- c) Educational material, videos and report to explain to the general population about the perinatal asphyxia is and its impact
- d) evidence-based documents to be written in collaboration with Brazilian Society of Pediatrics
- e) Communication using social media platforms