LETTER TO THE EDITOR

MICROCEPHALIA NO CICLO DE VIDA MATERNO-INFANTIL E SUA REPERCUSSÃO NA SAÚDE MENTAL

MICROCEPHALY IN THE MOTHER-CHILD LIFE CYCLE AND ITS IMPACT ON MENTAL HEALTH

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DEAR EDITOR,

The Zika virus (ZIKAV) is a neurotropic flavivirus that relates to the dengue, Yellow Fever and West Nile viruses. Although it has been identified for the first time in the world in 1947 in Zika Forest in Uganda, Africa, its first autochthonous transmission in Brazil was confirmed only in April 2015, with estimates that more than a million people in Brazil have been infected by this virus. In this way, it has shown its ability to produce outbreaks in large scale where the mosquito Aedes aegypti, the main vector in Brazil, is endemic¹.

The ZIKAV was originally isolated from a female Rhesus monkey with fever in the Zika forest, located in Uganda, in 1947, and relates to the virus of yellow fever and dengue fever, transmitted by the Aedes aegypti mosquito⁴.

After the beginning of the outbreak of ZIKAV, there was an increase in new cases of microcephaly in Brazil in newborns, being 1,248 new suspected cases in the year 2015, which can be classified as a jump in the number of confirmed cases⁵.

From 2010 to 2014, the average number of cases of microcephaly recorded annually in the Information System on Live Births (SINASC) was 156, however, in 2015, until December 1, there were already 1,248 newborns in the country with this pathology⁶, ⁷.

The growth in the number of insects and small animals in the cities results from the process of disorderly growth and economic and structural inequalities prevalent in the urban space. Thus, due to the lack of investment and planning, many regions suffer from a lack of infrastructure, especially in Northeast Brazil, such as neighborhoods in outlying areas and sites with many open sewers, ineffective garbage collection, which provides the proliferation of pests and diseases caused by them. To combat pests, a good pest control is not enough; there is need for a proper public policy⁸.

The most common causes of microcephaly may be associated with the genetic or environmental factors. Some environmental factors include perinatal hypoxia, congenital infections by STORCH (syphilis, toxoplasmosis, rubella, cytomegalovirus and herpes virus type 2), intrauterine exposure to ionizing radiation, abuse of alcohol and/or drugs, and maternal phenylketonuria. Some genetic factors include monogenic (mendelian) changes, chromosomal anomalies or multifactorial (polygenic) disorders. More recently, the involvement of ZIKAV virus infection in the causation of microcephaly⁹ has been proved.

Microcephaly is characterized by congenital malformation, in which the brain does not develop properly. It is defined by the size of the head circumference (HC) below the normal value, which is greater than 32 cm. The World Health Organization (WHO) defines microcephaly as HC below -2 standard deviations (HC<2SD), according to sex and gestational age at birth. The same is linked to the presence of neurological or structural changes and children with atypical motor development⁹.

However, it is of utmost importance to know the factors that caused microcephaly and its impact on mental health and the evidence to corroborate the recognition of the relationship of microcephaly with Zika virus in Northeast Brazil.

REFERENCES


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