

## Fundamental Health Rights: Microcefalia and Sanitary Policies to Combat the Zika Virus

## Direito Fundamental à Saúde: microcefalia e políticas sanitárias para combate do Zika Virus

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## Abstract

The present article portrays the Fundamental Right to Health and Basic Sanitation Policies as propelling mechanisms for human development. Based on the analysis of the National Combat Plan to Combat Zika Virus (ZIKV), we sought to address microcephaly as a global health emergency. To date, more than 48 countries have reported Zika virus transmission: North America; Central America; The Caribbean, and especially South America, with the highest incidence. This is why it requires the mobilization of public authorities and society through awareness-raising, investment in technology, research and basic infrastructure to eliminate the *Aedes Aegypti* vector in Brazilian territory.

**Keywords:** Public Policies. Zika virus. Microcephaly. Basic sanitation.

## Resumo

O presente artigo retrata o Direito fundamental à saúde e Políticas de Saneamento Básico como mecanismos propulsores para o desenvolvimento humano. A partir da análise do Plano de Enfrentamento Nacional para o Combate ao Vírus Zika (*ZIKV*), busca-se abordar a microcefalia como uma emergência sanitária de alcance global. Até a presente data, mais de 48 países já notificaram a transmissão do vírus Zika: América do Norte; América Central; Caribe e, em especial, a América do Sul, com maior número de incidência. Razão pela qual, requer a mobilização das autoridades públicas e a sociedade através de movimentos de conscientização, investimento em tecnologia, pesquisas e infraestrutura básica para a eliminação do vetor *Aedes Aegypti* no território brasileiro.

**Palavras-chaves:** Políticas Públicas. Vírus Zika. Microcefalia. Saneamento básico.

## 1 Introduction

The Zika virus originated in the East and West of the African continent and spread to several countries of South America and Central America. Despite the outbreak in the Yap Islands in year 2007 (Micronesia) and in 2013 in French Polynesia, even though yet do not had been studied the consequences of the Zika virus during pregnancy (ZORZETTO, 2017).

In Brazil, the virus came through by tourists and installed quickly due to the tropical climate and the absence of the Public Power in the implementation of policies related to the combat and control of *Aedes Aegypti* (Zika virus vector), characteristic of underdeveloped countries where there is no universality in access to drinking water, basic sanitation and adequate garbage collection.

One year after the Brazil Cup, the Ministry of Health identified the alarming increase in the incidence of newborns with microcephaly in Brazil. The evidences was that the microcephalic baby has a circumference smaller than 32 cm, given the result of the early union of the bones that form the skull (BRASIL, 2015).

Microcephaly affects the overall development of the individual, with impairment in the neurological, motor and respiratory systems. The level of sequelae varies according to the exposure of the fetus to the virus, if it occurred at the beginning or at the end of gestation.

The symptoms of the pregnant women presented a clinical picture of fever, itching and redness in the skin, besides red eyes, pains in the articulations, headache and indisposition. These symptoms can be confused with an influenza or viral disease, whose duration is between 2 to 7 days (SOUZA, 2016, p. 120).

The doctor Adriana Melo from Paraiba was responsible for the association between the Zika virus and microcephaly through the tests performed on the amniotic fluid donated by two patients who had Zika during gestation. It turned out that the virus crosses the placenta barrier causing permanent damage to the intrauterine development (DINIZ, 2016a, p. 1).

Therefore, the World Health Organization has stated that microcephaly is a global health issue, based on the Strategic Framework for Response to Zika, it has offered support for health authorities to implement *Aedes* vector control policies, as well as convening specialists in order to investigate mechanisms to combat the Zika virus (WENTZEL, 2016).

In this view, nations must take action, as there are strong indications of other forms of manifestation of the Zika virus (mutations) of global reach, as more than 48 countries have already reported the emergence of the virus (PAHO, 2017).

The lack of basic sanitation in the access to drinking water, besides the deficit in the management of urban waste, it has caused the population to suffering with Zika

virus epidemic, mainly in the peripheral cities of the Northeast where public services are absent or inefficient. The lack of control of the *Aedes Aegypti* vector in the Brazilian territory has caused numerous births of children with microcephaly, which require treatment for all life.

## 2 Fundamental health right

In Ingo Sarlet's magisterium, fundamental rights have the status of an irrevocable clause, guaranteeing full and immediate application for access to health (article 5, § 1 of the Federal Constitution). Such rights has the linked to the management of the public power and the role of the private sector, thus, until companies can act at odds with guarantees and fundamental rights (SARLET; MARINONI; MITIDIERO, 2015, p. 312-317).

In what concerns the right to health, the 1988 Constitution established as a universal right, in which it should be offered without distinction of race, colour, and economic condition. The legislator attributes to the Unified Health System (SUS) the duty to provide health services to the population, to carry out control and inspection of procedures, products, equipment and medicines, as well as other health-related inputs. It also instituted as SUS characteristics the decentralized organization, integral assistance, and should be a priority in disease prevention activities. The public health service should be offered in a regional and hierarchical way, formed by a single health system with the insertion of the community (MENDES, 2012, p. 484-487).

The Constitution provides for a fundamental right of access to health, however, the State fails and not offer a universal system. Carmem Teixeira affirm at understanding that the universality of the right to health does not materialize, since the system has failures, it does not overcome economic diversity, it does not achieve social justice, ends up favouring those who can be served by a private plan (TEIXEIRA, 2017).

In this same sense, public hospitals lack resources, ambulances, beds and specialized professionals, not to mention the lack of quality of service, or the absence of pediatricians and specialized doctors, which contributed to the fragmentation and individualization of services, in opposite with the SUS integrally principle (TEIXEIRA, 2017).

It's verified that hospitals in the Brazilian capitals have all the necessary equipment for surgical procedures and specialized service. The smaller Municipalities lack public resources, there is no basic infrastructure, obliging the patients to move to other Municipalities in search of medical service, with the risk of dying on the way.

In this way, the integrality and universality of the SUS stay committed since the Municipalities do not have the infrastructure sufficient to promote health under the justification of reserving the possible, affecting mainly those who need the beds and service units (RODRIGUES, 2016a, p. 46-48).

## 2.1 Dichotomy between the minimum existential and the reserve of the possible for the effectuation of health

The existential minimum works with the effectuation of fundamental rights considered as minimum for the reach of a dignified life, links state activity in the execution of public policies for the materialization of the right to health, safety, housing, education, among others. Thus, the existential minimum it's seen as a model of social justice proposed by the Federal Constitution of 1988 (WANG, 2009, p. 308-318).

On the other hand, the reserve of the possible has as a presupposition the limitation of the resources of the State that supposedly justifies relativizing the fundamental rights to attend to the government's budget plan (WANGN, 2009, p. 312).

It is necessary to recognize that the reserve to possible can to arise as a way of diverting the obligations of public managers in the achievement of private interests and corruption. In the hypothesis where detected the violation of a fundamental right and the exhausted the higher instances, the Judiciary will order the satisfaction of law, as for example, in cases where the SUS does not have vacancy for intensive treatment. The public Manager is obligated to refer the patient to a private hospital, since the right to health has immediate application under penalty of loss of the object, that is, the patient's life (CANELA JUNIOR, 2011, p. 105).

Canela Junior argues that government management, as well as the implementation of social public policies, should be linked to art. 3 of the Federal Constitution, whose objectives are to build a free, fair and solidarity society, guarantee national development, eradicate poverty, marginalization and reduce social and regional inequalities. It also proposes the promotion of the well-being of all, without prejudices of origin, race, sex, colour, age and any other forms of discrimination (CANELA JUNIOR, 2011, p. 106).

In this way, the theory of the reserve of the possible becomes incompatible with the reality proposed by the legislator. The State must readjust its income and expenses so that part of its budget is destined to the promotion of fundamental rights (CANELA JUNIOR, 2011, p. 109).

Moreover, in cases of conflict between the reserve of the possible and the minimum existential, the Supreme Court of Justice recognizes that the budget deficit should not prevail to the detriment of human dignity. The treated of health is a right immediate and not submit to the pragmatism of the State (CYRINO; AMORIM, 2016, p. 317-350).

The Judiciary cannot refrain from acting in the tutelage of fundamental rights, under penalty of omission. Thus, it is not an affront to the principle of separation of powers, since the State has the duty to offer the integrality of health care, individually or collectively (GRINOVER; KAZUO, 2013, p. 130).

The increasing demands that involve the provision of medication or treatment especially the problem brought about by the Zika virus epidemic. Requisition that Public Administration to treat of health and the policies establishing health guarantees on form of a priority of government, recognizing the importance of prevention once that resources are complete and the Unified Health System does not have the whole set of specialists for the treatment of children born with microcephaly.

### **3 Zika Virus: a global reach**

There is evidence that the Zika Virus arrived in Brazil in 2014 with the advent of the World Cup, when it was certificate the alarming growth of people infected by the virus. Brazil was one of the first countries to link the Zika virus with microcephaly through a partnership between the Hospital of the Eyes of Pernambuco, the Altino Ventura Foundation and UNIFESP. In which researchers and physicians have identified that even without microcephaly, babies can develop abnormalities and developmental delays if they get in touch to the virus during the gestation period (THE LANCET, 2017).

The symptoms of pregnant women was presented a clinical picture of fever, itching and redness of the skin, red eyes, joint pain, headache, malaise (BRASIL, 2017b), are symptoms that initially can be confused with an influenza or virus, they last about 2 to 7 days (EBC, 2016).

The Brazilian government authorities face a new paradigm about the difficulty in the budget to offer the fair shelter to the children with microcephaly, due to the necessity of care for the whole life, implies in the increase of expenditures destined to the health, budget deficit and consequently a growing of access to health.

With the present work, it was possible to identify that the Zika virus is a global health problem. In this situation which depends on cooperation between countries in the study of the effects of the Zika virus on the human body, especially on pregnant women, who need an immediate solution of the State in the prevention and fighting the virus in the baby's organism.

After the outbreak, the World Health Organization has charged for provision for Brazil to adopt measures to control and combat the Zika virus. The effects of the virus are still being studied measures should continue to develop new technologies responsible for detecting and containing the virus's progress, as well as centers for care and support for people with microcephaly (WHO, 2017).

#### **3.1 Public policies to combating the Zika virus**

The strategic plan drawn up by the Government in response to the Zika virus and the *Aedes Aegypti* vector consists of the integration of programs, protocols and

elaboration of guidelines that serve as support for countries facing similar problems and thus be able to join forces in the Zika virus. In this sense, it is essential that there be joint participation of the entities of the Federation (Union, State, Municipalities and Federal District), considering that the “combat plan” consists only of the strategy of intensifying inspection visits in urban and rural houses, commercial areas, as well as buildings and land of responsibility of the State. The Public Power promotes the management of inputs with the supply of adulticides and larvicides in the fight against the mosquito’s focus, without forgetting the population’s awareness through television media and pamphlet advertising (BRASIL, 2017c).

Among the proposals offered by the government are prevention, early diagnosis for the treatment and stimulation of children with microcephaly through the SUS. The reception and financial assistance to families who have babies with microcephaly and, above all, the promotion of research and technology in both national and international institutions, with the aim of developing invocations to combat the Zika virus and, consequently, reduce the number of newborns with microcephaly. (BRASIL, 2017c).

The complexity of the control of the Zika epidemic, which requires the most effective action of the Public Power, since the measures identified are the same as those of 30 years ago. Such measures were not enough to combat the vector *Aedes Egphit*, the neglect of the Government brings countless consequences, such as the outbreak of babies born with microcephaly, as well as the concern about the absence of an effective plan to combat the *Aedes* vector.

Treatment and assistance units for children, young people and adults will be to overburden by the increasing number of affected with microcephaly and their global difficulties, especially neurological, nutritional and motor problems, requiring lifelong care.

Another problem that instigates health authorities and the the medical class is the possibility that the fetus may be infected by Zika at any time during pregnancy, hence the need the medical monitoring during the prenatal care and proper guidance for pregnant women and family members in mobilizing the fight against the *Aedes* vector. Prevention is characterized by the use of protective screens in the windows of residences, correct disposal of municipal waste that accumulate standing water, as well as avoiding places and times that have a high mosquito flow.

The Ministry of Health has provided a recommendation for contraceptive methods to postpone maternity until studies are developed that are capable of producing a vaccine that inhibits or stops the effects of the Zika virus in the human organism. If it is not possible, it recommended the continuous use of repellents with the composition n-Diethyl-meta-toluamide (DEET) which, according to the results, do not pose a risk to the baby, also requested the use of clothing to cover the lower and upper limbs in order to avoid contact with the *Aedes* mosquito (SALGE, 2016, p. 1518-1944).

However, despite innumerable recommendations in combating Zika virus, the government is still negligent in ensuring universality of access to basic sanitation, a measure considered effective for eliminating vector focus in homes that still use cisterns and buckets for storage of drinking water.

#### **4 Health policies as an effective mechanism for the prevention of diseases**

The health law next to the right to health received fundamental connotation with the advent of the Brazilian Constitution of 1988, since until then it unrecognized by the other Constitutions, except for the Federal Constitution of 1934 that provided for the competence of the Union and states to take care of health, according the art. 10 item II of said Charter. The normative text also ensured the implementation of measures on the restriction of infant mortality and morbidity, social hygiene policies to hinder the proliferation of communicable diseases (DALLARI, 2008, p. 9-34; RAMOS, 2017).

Dallari acknowledges that no one can be responsible for their health when there are several environmental characteristics, economic and socio-political factors that threaten public health. The patent for a drug is a clear example that can condition the well-being of the population, because the state does not have the technology to develop and provide a specific remedy (DALLARI, 2008, p. 15-33).

In what confers the attributions of SUS, art. 200, I, II, IV of the Constitution provides for the control and inspection of procedures, products and substances that interest public health, as a sanitary surveillance action, worker health and participation in the formulation of public policies for basic sanitation (DALLARI; MAGGIO, 2017, p. 58-76).

Maggio and Dallari observation to the emergency in the implementation of destined the public polices effective access to health, with demands that imply sanitary improvement capable of assuming the right to health as a public policy predominant to State resources and not mere discretion in light of the promise of the Charter Magna of 1988 (DALLARI; MAGGIO, 2017, p. 55).

As is already known that *Aedes Aegypti* takes at advantage of domestic environments like backyards that have objects with standing water, pet bottles, vases, abandoned tires and urban garbage stored in an inappropriate place. Vector-control policies are insufficient not only for budgetary and logistical reasons, but also for lack of population awareness in the correct allocation of urban waste, such as separating solid waste from organic waste and the absence of collection points (PINTO JUNIOR; PARREIRA; FERRINHO, 2015, p. 760-765).

In fact, the link is established between the increases in cases of microcephaly in regions where there is no basic infrastructure for the population, the supply of



public services is non-existent or precarious, confirming the inefficiency of the Public Administration in the realization of fundamental rights, which is contrary to the principle of human dignity.

#### **4.1 Dignity and well-being through the universality of basic sanitation**

The re-democratization of Brazil and the health reform listed health as a fundamental right in 1988, recognized as a right that integrates social security, composed of a single health system to meet the multiple needs of the population. The Magna charter also establishes as a citizen's right to effective judicial protection to guarantee access to health, whenever there is verified interference of the Executive in the actions of health policies (D'ÁVILA; SALIBA, 2017, p. 15-38).

Basic sanitation is composed of: a) access to water; b) sanitary sewage; c) urban cleaning and solid waste management; d) drainage and management of urban rainwater.

The insufficiency of the Government to provide basic sanitation especially compromises the quality of human life and the ecologically balanced to environment, as it defies the principles of protection and precaution. Thus, the repeated legislative changes favour the increase of the deadline for the presentation of the Municipal sanitation plan, as well as for the non-implementation of public social policies (RODRIGUES, 2016a, p. 297-327).

In this line, basic sanitation was recognized as an indispensable right for the promotion of human dignity by the United Nations, should be observed as a priority by public managers and not just as a principle envisaged in the text of law (GRANZIERA, 2015, p. 291).

The Law No. 12,305 / 2010 is responsible for regulating the National Solid Waste Policy, which in its art. 47 makes it prohibited to dispose of municipal waste in the beach, sea or any water area. It also provides for the accountability of individuals and legal entities and the State. It emphasize that the Public Authorities would may adopt appropriate measures to contain the environmental impact, whenever it has information on the damage to the environment or public health, according to art. 29 of the law (DOMINGOS; VEIGA, 2017, p. 253-254).

In what it consists the insufficiency of basic sanitation and consequently the proliferation of the Zika and Chikungunya virus in Brazil if affirm that problems are resultant of years of neglect by the governmental organizations. These problems is relate for inappropriate sewage treatment of residences and also by a lack of management of solid urban waste that are deposited directly into the water resources without any concern with the contamination of the seas and rivers or damage caused to the environment (RODRIGUES, 2016b, p. 298).

There are the millions of people in Brazil still do not have access to potable water, remaining the irregular storage in cisterns, buckets and boxes of water that make the place conducive to the proliferation of the mosquito *Aedes*.

The policies to combat *Aedes* vector will be frustrated if not has the universalization of basic sanitation, as well as the effective punishment for those who cause damage to the environment.

The omission of public managers in providing basic fundamental rights for the maintenance of human dignity: a) access to health; b) basic sanitation; c) drinkable water; d) garbage collection implies the intervention of the Judiciary and the Public Prosecutor's Office. It takes the Citizen to use the constitutional remedies recognized as Popular Action, Habeas Data, Habeas Corpus, Security mandate, Injunction Mandate, Collective Security Mandate to safeguard the fundamental social rights.

In fact, the Public Prosecutor's Office expresses itself through the Public Civil Action envisaged as a mechanism suitable for the protection of diffuse or collective interests, public and social patrimony, since it also used to investigate acts of administrative improbity in the environmental field, and is not necessary to demonstration by fault or malice. The responsibility of the State is objective, simply the omission of the proper treatment of garbage or damage caused by public works or services (RODRIGUES, 2016b, p. 299).

On the other hand, society must behave in a proactive way, this means closely monitoring the mayors' projects, charging for the effectiveness of public policies, inspect and denounce the illicit performance of companies, considering society as the main beneficiary and consequently the most affected by the planning instruments of Public Managers (RODRIGUES, 2016b, p. 300-225).

According to Diniz (2016b), the control of Public Administration and administrative probity are fundamental rights that must be protection by the State. It is worth to say that the Public Power should not be reckless, since the administrative acts are subject to jurisdictional control due to their motivation or misuse of purpose and also, in the circumstances that occur the overbilling of public works or lack environmental protection.

In view of the above, the increase in cases of microcephaly in the country is a result of more than 30 years of neglect of the Public Power that together with the society that did not make proper control of the vector *Aedes* (BRASIL, 2017a).

Indeed, the municipalities most affected are those of low development, located in the Northeast, as well as the other localities of Brazil in situation of poverty or miserability that there is the correct discard of garbage, nor the minimal infrastructure of urbanization.

Microcephaly was one of the consequences caused by lack of basic sanitation, potable water and access to public health. The Zika does not choose race, colour and social status, can reach any person, since social inequality is omnipresent in Brazil.

From this point of view, even if the neighbourhood of a city benefits from infrastructure, public services and quality of life, it has a neighbouring that does not have the same apparatus of the Public Power, which implies the incidence of mosquitoes and diseases in both neighbourhoods, given the mobility of the *Aedes Aegypti* vector. It is also noted that diseases no longer exist in developed countries with better economic indices and management of solid urban waste, where sanitary policies have reached an index closer to the universality sought by the Federal Constitution of 1988.

## 5 Final considerations

The lack of public and sanitary policies aimed at the control of the *Aedes Aegypti* mosquito resulted in the proliferation of the Zika virus in Brazil. With more than two thousand newborn being in registered, demonstrating that the resources applied for vector prevention and control are insufficient, especially lack of basic sanitation in the most peripheral regions of the Northeast (where located the highest incidence of newborns with microcephaly was reported).

With this, it demonstrated that the country needs investment in basic sanitation in an emergency way for the epidemiological control of tropical diseases, typical of countries still underdeveloped. It is worth noting, that both the irregular water supply in cisterns or buckets and the lack of regular collection of solid waste and urban sewage interfere with the quality and well-being of the population.

The Northeast was always been affected by the inefficiency of the Public Power; however, only with the involvement of an epidemic of alarming expansion capable of reaching the other social classes, Brazil turns to the regions that until some years ago were forgotten. Children affected by Zika regardless of the economic condition of their families will face irreversible health problems, neurological damages that persecute the individual for life.

Therefore, despite the births index of microcephalous infants has been reduced, it is undeniable to affirm that it was not a the result of State action, turned to access to basic sanitation and water resources in a universal way, but on the utilization of palliative mechanisms in the Zika virus combat, such as the use of repellents and contraceptive measures.

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