

Maternal-Infant Triad of Cardiovascular Health: Pregnancy, Breastfeeding and Public Policies

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Since I decided to work in cardiovascular health, I see with concern that cardiovascular disease continues to be the number one killer in the world and that its prevalence and incidence are increasing every day [1]

Analyzing the literature, health services, and government education programs, I observe that we are making a mistake: we only focus on diagnosis and disease and not on effective prevention. And when prevention activities are carried out, they are focused on action and separating the importance of collective health, the social sphere and local reality.

As Rose said, "Case-focused epidemiology identifies individual susceptibility, but may be unable to identify underlying causes of incidence." Because of this it is important that the priority concern in health epidemiology should always be directed to **discover and control the causes of the incident** [2]."

In this search for causes that can influence the increase in cardiovascular disease, it is important to analyze 3 aspects of maternal and child health: the health of pregnant women, breastfeeding, and the creation and regulation of public policies that guarantee compliance with surveillance, and monitoring of the health of the pregnant woman and the implementation of Breastfeeding.

The first aspect in which I want to express my position is food, nutritional status and the health of the pregnant woman. On the one hand, in the health aspect it is important to monitor it since a third of the complications of pregnancy are related to hypertensive states, gestational diabetes, changes in weight and polycystic ovary syndrome (since 10% of women suffer from it and that it is associated with an increased risk of CVD). In the field of diet and nutritional status, there are dietary beliefs and myths in the gestation stage (Example: eating for two, high sodium cravings, among others) that favor weight gain, gestational hypertension, preeclampsia, diabetes, and at the same time, there is a double burden of malnutrition, evidencing deficiencies of key nutrients in cardiovascular health such as folate, vitamin B12, vitamin C, vitamin A, iron, zinc, and iodine. In this way, the nutritional status of the mother is important since the deposit of adipose tissue during pregnancy tends to predominate in the central and visceral location, with great repercussions on cardio-metabolic risks. Adding to the above, it is reflected in a genetic load since weight gain during pregnancy is a predictor of the distribution of total fat and adiposity during the child's childhood, and

this adipose tissue functions as an endocrine organ that secretes acute phase proteins causing proinflammatory processes and insulin resistance [3].

The second aspect is breastfeeding, it is important to promote it since it provides cardiovascular protection for the mother-child pair since it affects: the decrease and regulation of postpartum blood pressure (the mother's BP rises when the baby is born) due to the presence of oxytocin, it affects glucose homeostasis, lowers blood lipids, reduces excess gestational weight, increases the mother's life expectancy, has effects on the infant microbiome (which modulates cells in the baby). T and immune regulation, metabolic responses, adipogenesis, among others) and reduces the risk of postpartum hemorrhage in the mother [4-6].

The third aspect to analyze is the importance of generating solutions at a collective level that support actions that are in line with maternal and child health care from the creation and implementation of mandatory government public policies and creating regulations that determine their practical exercise. This action is necessary in this triad to affect cardiovascular disease prematurely. In the implementation of public policies, there are several aspects that must be strengthened: support in hospitals and health services, control in the marketing of Breast Milk substitutes, increasing literacy in different environments, creating new communication strategies, supported by scientific data, about the benefits that breastfeeding brings to babies, mothers, family and the environment [7].

Although the causes of cardiovascular disease are multifactorial, it is clear that the genetic load, epigenetics, breastfeeding and an environment with political regulations that favor health literacy are key aspects in the premature reduction of the appearance of diseases. cardiovascular.

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