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REVIEW ARTICLE

MATERNAL DEATHS AND THEIR MAIN CAUSES

DANYELLE AMORIM DE LIMA PIRES, PATRÍCIA GONÇALVES EVANGELISTA[2],
WALDEMAR NAVES DO AMARAL[2]

ABSTRACT

Pregnancy is a period of innumerable changes in a woman's life, as it triggers physiological, psychological and emotional changes and adaptations, which require specialized attention and care. Although most pregnancies evolve within normal standards, maternal and perinatal morbidity and mortality rates remain high in Brazil, especially with regard to maternal complications during pregnancy, childbirth and the puerperium. Over the years, Brazil has invested in the protection of maternal death. The incentive through strategies to encourage the use of evidence-based practices was one of the main milestones for this process. However, the ideal has not yet been reached and the main obstetric complications that contribute to raising the maternal death rate are linked to infectious diseases, heart diseases or endocrinopathies (Gestational Diabetes Mellitus, Thyroid Diseases), Specific Hypertensive Gestation Syndrome (SHEG), fluid disorders Amniotic, Hemorrhages in the second half of pregnancy, among other pathologies, so there is still a need for public policies to promote the effective change of this scenario.

KEYWORDS: OBSTETRICS. WOMEN'S HEALTH. HUMANIZED CHILDBIRTH. UNIFIED HEALTH SYSTEM.

INTRODUCTION

Pregnancy is a period of countless changes in a woman's life, as it triggers physiological, psychological and emotional changes and adaptations, which require specialized attention and care. The endocrine and physiological changes in the pregnancy cycle aim at adapting the mother's body to the presence of the fetus, as a way to ensure its proper development, in which most of the time it is uneventful[1].

Although most pregnancies evolve within normal standards, maternal and perinatal morbidity and mortality rates remain high in Brazil, especially with regard to maternal complications during pregnancy, childbirth and the puerperium. On the other hand, it is known that humanized and good quality health care would prevent many women from losing their lives for reproductive reasons[2].

The World Health Organization estimates that 1,000 women worldwide die from complications of pregnancy or childbirth every day. Currently, in the country, for every 100,000 women, 70 to 150 die from some cause related to pregnancy and childbirth, and its main causes are related to complications during pregnancy, childbirth and puerperium, these being gestational hypertension, complications at work of childbirth, puerperal infection, abortion and others due to indirect obstetric causes[3].

Estimates indicate that between 25% and 35% of maternal deaths in the world can be attributed to obstetric hemorrhages and Asia and Africa are the continents with the highest number of victims. In Brazil, postpartum hemorrhage (PPH) is the leading cause of maternal death among complications unique to childbirth and puerperium, and it reaches mortality rates of 1 in 30,000 live births [4,5].

Changing the scenario of obstetric care in Brazil is a challenge and requires structural changes in care services, changing some cultural paradigms and, above all, professional qualification and effective inclusion of obstetricians and obstetric nurses in order to contribute to the reduction of maternal and neonatal morbidity and mortalityl[6].

The reduction of maternal mortality in Brazil is still a challenge for health services and constitutes a violation of women's human rights, as it is an avoidable situation in most cases. From 1968 to 2018, 38,919 maternal deaths were registered in the Mortality Information System (SIM), 67% were due to direct obstetric causes, that is, obstetric complications during pregnancy, childbirth or the puerperium.

In this sense, the aim of this study is to report the obstetric emergencies related to vaginal births through a literature review.

1. Hospital e maternidade Dona Iris
2. UFG/GO

MAILING ADDRESS
PATRÍCIA GONÇALVES EVANGELISTA
Alameda Emílio Póvoa, 165 - Vila Redenção
Goiânia - GO, 74845-250
E-mail centrodeestudoshdmi@gmail.com

HISTORY OF ASSISTANCE IN BIRTH FOR THE PROTECTION OF MATERNAL DEATH

Over the years, assistance in labor and delivery in Western societies has undergone major changes. Initially, it was configured as a household event, carried out by pregnant women and midwives[7]. This scenario has changed gradually in recent years, with the insertion of medical professionals and the hospital scenario[8]. Such transformations were associated with the ways of life that were consolidated, by values that favored technologies, economic benefit and biological science, and by techniques such as cesarean surgery and anesthesia [9].

The creation of the Network for the Humanization of Childbirth (REHUNA), in 1993, strengthened the movement in the country. Having a fundamental role in the structuring of a movement that today is called "humanization of delivery/childbirth". This movement was intended to reduce unnecessary interventions and promote care for the pregnancy/delivery/birth/breastfeeding process based on an understanding of the natural and physiological process[10].

In this construction of an adequate model, groups of scholars supported by the WHO organized themselves to systematize studies regarding new practices in childbirth care, in order to ensure the adoption of scientific evidence and ensure its widespread use in the delivery care network and birth[11]. In 1996, the WHO published recommendations based on the best scientific evidence classified into four groups: Group A, useful practices that should be encouraged; Group B, harmful or ineffective practices that must be eliminated; Group C, practices without sufficient evidence and which should be used with caution and require further research; and Group D, practices used inappropriately[10].

Despite all these proposals and actions to change the delivery care model, in Brazil, care is still marked by several unnecessary interventions compromising maternal and neonatal health. The high rates of interventions during labor and delivery without clinical indication, such as the use of oxytocin, artificial rupture of amniotic membranes, episiotomy, kristeller maneuver, high number of cesarean sections and inadequate management with a healthy newborn are routine procedures in maternity hospitals. Therefore, care is often not adequate and timely, resulting in serious complications for women, especially maternal mortality[12].

One of the strategies used by the Ministry of Health (MS) to encourage the use of evidence-based practices in the delivery and birth process was the implementation in 1999 of the Normal Childbirth Centers (CPN), aiming at a reduction in perinatal and maternal mortality, enabling humanized care and expanding access to health services[13]. In this perspective, studies that compared the care provided in an Obstetric Center (OC) and CPN showed the improvement of childbirth care in the second model, as there was a lower rate of perineal trauma and interventions such as analgesia, episiotomy and use of oxytocin, in addition to fewer transfers for operative deliveries[14].

In 2003, in Brazil, the National Humanization Policy (PNH) of care and management in the Unified Health System (SUS) was created in the daily care and management practices, with the aim of qualifying health and transforming the relationship between managers, workers and users. The PNH has been composing and articulating strategies to improve health care and work, such as welcoming with risk classification, the management collegiate, the guarantee of open visits and the right to a companion, among others[13].

As a necessary continuity of women's political achievements, in 2011 the Cegonha Network was launched as a strategy instituted within the Ministry of Health to ensure women the right to reproductive planning and humanized care during pregnancy, childbirth and puerperium, and children the right to safe birth, as well as healthy growth and development. Therefore, it is essential to change the model of care during labor and birth, with the development of actions that meet good obstetric practices[15].

The Zero Maternal Death by Hemorrhage Strategy was also implemented in Brazil, based on the attributions of the project that was conducted by the Latin American Center for Perinatology. An action of the Pan American Health Organization/World Health Organization (PAHO/WHO) and Strategy of the Ministry of Health of Brazil (MS) with actions and strategies for strengthening and qualifying assistance in a multifocal perspective of care at different levels of complexity necessary to guarantee access and completeness [4,5].

MAIN INTERCURRENCES FOR MATERNAL DEATH

Obstetric complications are a set of physical conditions caused or aggravated by the physiological adaptations of pregnancy and which, according to their degree of manifestation, can result in hospital admissions, major complications and even maternal death. These complications include infectious and contagious diseases, heart disease or endocrinopathies (Gestational Diabetes Mellitus, Thyroidopathies), Specific hypertensive disease of pregnancy (SHDP), Amniotic Fluid Disorders, Hemorrhages of the second gestational half, among other pathologies[16].

Even with advances in the obstetric area, maternal morbidity and mortality are still present. Maternal obstetric complications reflect, above all, the potential risk during prenatal care, childbirth and the puerperium. The survey of these data raises the need for actions and strategies in health units aimed at maternal and child health. Obstetric care needs to be placed not only as a public health issue, but also as a moral, ethical and economic matter [17].

Childbirth-related death should not be expected or considered normal. Motherhood is not a disease and therefore great care must be taken when comparing maternal mortality with other health problems. Maternal death is a sentinel event, an important marker of the quality of the health system, especially in relation to access, adequacy

and opportunity for care, closely related to the social vulnerability of populations. In Brazil, the discussion on avoidable maternal mortality needs to go beyond health issues and coping strategies need to evoke the reconstructive perspective of care[17].

In the country, maternal deaths from direct obstetric causes predominate. Among them, Specific hypertensive disease of pregnancy (SHDP) and Hemorrhagic Syndromes (HS) are the main causes. SHDP, together with HS and infection form the "death triad" and contribute to the increase in mortality rates [18,19,20]. Currently, maternal morbidity and mortality in Brazil remains high and incompatible with the country's gradual economic and social development. The high rates are used to assess the quality of women's health care and reflect violations of human rights, as most of these deaths could be avoided [19,21].

In 2015, there were around 303,000 maternal deaths related to pregnancy or labor, 99% of which were in developing countries and it is estimated that the majority could have been prevented. Maternal mortality in developing countries is 239 per 100,000 live births and in developed countries it is 12 per 100,000 live births [22,23].

Haemorrhage is the leading cause of maternal mortality, accounting for about 27.1% of deaths worldwide. In Portugal, the most common causes of maternal death are hemorrhagic syndromes and coagulopathies, which account for 26%. Its prevalence is approximately 6% in all births in the world, being higher in Africa 10.45%, followed by Latin America and the Caribbean 8.90% and by Oceania 7.68%, with intermediate values, then by North America 6.37% and Europe 6.38 %, and finally Asia with 2.55%, being the country with the lowest prevalence[24].

Despite advances in the obstetric area, morbidity and mortality are still present in the pregnancy-puerperal cycle and, especially, in the postpartum period. Maternal obstetric complications reflect, above all, the potential risk during prenatal care, childbirth and the puerperium. Maternal mortality is a health indicator that shows social inequalities between countries and between rich and poor, urban and rural regions. According to the WHO, the fifth millennium development goal, "Improving the Health of Pregnant Women", established by the UN in 2000, remains a great challenge. It emphasizes that less than 40% of countries have a complete civil registration system with good attribution of the cause of death, making it difficult to correctly estimate the maternal mortality rate[23].

With a scenario still far from what is recommended by the WHO, Brazil is known for the high incidence of cesarean sections, with a proportion of 45.5% of this surgery in women at habitual obstetric risk. In addition to the mode of delivery, medical interventions are excessive. Only 5.6% of mothers at usual risk and 3.2% of primiparous women give birth naturally, without any kind of intervention in the physiology of labor[3,25].

The alarming increase in the proportion of cesarean sections had a paradoxical effect, as the greater use of this technology did not reflect a decrease in maternal and neonatal morbidity and mortality and, on the contrary, had an impact on the increase in iatrogenics. This effect leveraged discussions and research that gradually spread the perception of the quality of care being related to the preservation of the physiology of childbirth[15].

FINAL CONSIDERATIONS

Over the years, Brazil has invested a lot in public policies for the protection of maternal death. Encouraging through strategies to stimulate the use of evidence-based practices was one of the main milestones for this process.

However, the ideal has not yet been reached and the main obstetric complications that contribute to increase the rate of maternal death are linked to infectious diseases, heart disease or endocrinopathies (Gestational Diabetes Mellitus, Thyroidopathies), Specific hypertensive disease of pregnancy (SHDP), Amniotic fluid disorders, Hemorrhages of the second gestational half, among other pathologies. Therefore public policies are still needed to promote effective change in this scenario.

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