

MATERNAL MORTALITY OF BLACK WOMEN IN BRAZIL, 2008 TO 2016: A DESCRIPTIVE STUDY

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Abstract: Maternal mortality is considered a global public health problem. It has been observed in a historical series that most maternal deaths occur in developing countries, affecting mainly black women. Therefore, this study aimed to describe the maternal mortality of black women in Brazil from 2008 to 2016. This is a descriptive study using secondary data and a quantitative approach. The results showed that there was an increase in the maternal mortality ratio from 2015 to 2016, with a higher frequency of deaths among black women in the Southeast Region of Brazil. It is necessary that health policies include care practices free from inequities and prejudices at all levels of care and that promote reflections on health inequalities, especially racial and geographical ones.

Keywords: Maternal Mortality, Black population, Epidemiology.

INTRODUCTION

Maternal mortality (MM) is considered a global public health problem and is defined as the death of a woman during pregnancy or within 42 days of termination of pregnancy, regardless of the duration or location of the fetus, arising from any related cause and /or aggravated by pregnancy or related measures, without association with accidental or incidental causes (KASPER et al., 2016; KHAN et al. 2006; WHO, 1998).

Maternal death is quantified by the maternal mortality ratio (MMR) indicator. The calculation is made through the ratio between the number of female deaths from maternal causes and the number of live births, in a population residing in a given geographic space, in the year considered, with the result multiplied by 100,000 (OPAS, 2002).

The high mortality rates are an example of human rights violations and reach underprivileged social classes unequally (MARTINS, 2006). In 2015 alone, more

than 300,000 maternal deaths occurred, approximately two thirds of which took place in an environment with little technological health resources and could have been avoided (WHO, 2015). It has been observed that most maternal deaths occur in developing countries and mainly affect black women (TAVARES; ANDRADE; SILVA, 2009; WHO, 2015). The black population is understood to be composed of black people plus brown people (BRASIL, 2009).

After the Millennium Goals were established by the United Nations, Brazil signed a commitment to reduce the maternal mortality ratio by three quarters between 2000 and 2015 (UNITED NATIONS, 2015). However, the value defined to reach in Brazil of 35/100,000 for the MMR was not reached, especially with regard to the race/color variable in access to quality health care (SENADO, 2015). Several studies such as those by Almeida et al. (2015), Madi et al. (2016) conclude that the reproductive profile of women varies according to social groups. Studies such as Chor and Lima (2006) and Martins (2006) reveal that the groups most vulnerable to MM are made up of women with lower income and education, together with racial characteristics.

Brazil, divided into five geographic regions, has a Human Development Index (HDI) of 0.754 and remains in the 79th position in a ranking of 188 countries. It is a territory that includes internal inequalities related to access to health care due to economic and social factors, since not all regions have the same economic structure and health services.

The Midwest Region, for example, even though it is the least populous in Brazil, has the third highest RMM with 54.6/100,000, after the Northeast and North regions (BRASIL, 2018). It is considered the region that showed the least reduction in MM, of 56.2% in the periods between 1990 and 2013

(WHO, 2012; SILVA et al., 2016).

It is a consensus in the scientific literature that the black population, especially women, are considered a group more vulnerable to diseases, since they are under greater influence of social determinants of health. The question of skin color in maternal deaths has been investigated since 1993 in Brazil. However, data with a cutoff according to race/color were only made available by DATASUS from the year 2001 onwards, which promotes the visualization of possible inequalities in health care (MARTINS, 2006). In Brazil, “the proportion of maternal deaths of black women accounts for just over half of maternal deaths” (BRASIL, 2009, p.8). Therefore, this study aimed to describe the maternal mortality of black women in Brazil, from 2008 to 2016.

METHODOLOGY

This is a cross-sectional, descriptive, retrospective study using secondary data and a quantitative approach. Cross-sectional studies can serve to generate hypotheses from the collection of information on the frequency and distribution of variables related to the health-disease process in different populations and socioeconomic contexts (BONITA; BEAGLEHOLE; KJELLSTRÖM, 2008). Data on the number of maternal deaths of black women aged between 10 and 49 years were analyzed. Data were obtained through the Information Technology Department of the Unified Health System (DATASUS). For each variable and its categories, data were collected year by year, and a database was built in Excel 2013 software. From the data collected under the race/color cut, established as dependent variables, the proportional maternal mortality ratios were calculated. by race/color.

The time frame established was from 2008 to 2016. It is explained that the choice of period coincides with the most recent women's health policies, namely, the implementation of the

Childbirth and Birth Humanization Program (PHPN) in 2000, the implementation the Rede Cegonha (2011) and the National Policy for Comprehensive Health Care for the Black Population (2007). Finally, the year 2016, in addition to being subsequent to the aforementioned policies, was the most recent year for which maternal mortality data were available, by DATASUS, during the period of this study.

RESULTS AND DISCUSSION

The historical series of data on maternal deaths of black women between 2008 and 2016 in Brazil is shown in Table 1. In the same period, 7,709 maternal deaths were confirmed in the country. The MMR ranged from 58.7 to 48.3/100,000 live births (LB) from 2008 to 2016. More than half of these deaths (61%) occurred during the postpartum period (up to 42 days after delivery), and 39% occurred during pregnancy, childbirth or abortion.

Table 2 shows the distribution of maternal deaths of black women in the five regions of Brazil, namely: North, Northeast, Southeast, South and Midwest. The lowest number of deaths between 2008 and 2016 was found in the South region, and the highest in the Northeast and Southeast regions, with 3,151 and 2,379 deaths, respectively. In general, there was an increase in deaths throughout the period studied, with a slight reduction in 2015. This trend is in line with what has been observed in the scientific literature, as pointed out by Martins (2006), who indicates that deaths maternal deaths are more frequent in the Northeast region and less frequent in the South region.

Data made available by the Ministry of Health (MS) indicated that MM indicators in Brazil have been increasing since 2008, both for women of white race/color and for those of black race/color. This situation does not necessarily represent a growing aggravation

| Year | During pregnancy, childbirth or miscarriage | | During the puerperium (up to 42 days) | | Maternal deaths | |
|------|---|------|---------------------------------------|------|-----------------|------|
| | Frequency | RMM | Frequency | RMM | Frequency | RMM |
| 2008 | 309 | 21,5 | 422 | 29,3 | 731 | 50,8 |
| 2009 | 397 | 27,7 | 444 | 31 | 841 | 58,7 |
| 2010 | 329 | 23 | 444 | 31 | 773 | 54 |
| 2011 | 313 | 20,1 | 491 | 31,5 | 804 | 51,6 |
| 2012 | 317 | 19 | 490 | 29,3 | 807 | 48,3 |
| 2013 | 317 | 18,7 | 567 | 33,5 | 884 | 52,2 |
| 2014 | 359 | 20,4 | 639 | 36,4 | 998 | 56,8 |
| 2015 | 320 | 18 | 614 | 34,5 | 934 | 52,5 |
| 2016 | 311 | 18,3 | 626 | 36,8 | 937 | 55,1 |

Table 1 – Frequency of maternal deaths and maternal mortality ratio of black women, Brazil, 2008 to 2016
Self elaboration. Source: Ministry of Health / DATASUS (2008-2016)

| Region | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|--------------|------|------|------|------|------|------|------|------|------|-------|
| North | 93 | 114 | 98 | 128 | 115 | 151 | 183 | 141 | 161 | 1.184 |
| North East | 329 | 344 | 331 | 338 | 326 | 377 | 376 | 372 | 358 | 3.151 |
| Southeast | 209 | 268 | 259 | 240 | 259 | 247 | 316 | 294 | 287 | 2.379 |
| South | 30 | 44 | 29 | 36 | 36 | 23 | 31 | 41 | 46 | 316 |
| Midwest | 70 | 71 | 56 | 62 | 71 | 86 | 92 | 86 | 85 | 679 |
| Total | 731 | 841 | 773 | 804 | 807 | 884 | 998 | 934 | 937 | 7.709 |

Table 2 – Frequency of maternal deaths of black women by Region, Brazil, 2008 to 2016
Self elaboration. Source: Ministry of Health / DATASUS (2008-2016)

of the risk of maternal death, but it may reflect an improvement in the notification and investigation of suspected maternal deaths. The predominant occurrence of deaths in the puerperium draws attention to the fact that this period requires greater attention from professionals and investment in health policies (PETRUCCELLI; SABOIA, 2013).

Among the possible explanations for a higher risk of death among black women, according to Leal et al. (2017), lower numbers of requests for childbirth review stand out; insufficient anamnesis and health assessment exams when compared to non-black women; in addition, black women receive less information, or have it omitted by health professionals, regarding the right to postpartum consultation up to 42 days after childbirth. This scenario suggests that — if the care provided in health services did not differ according to race/color and the quality of care offered was the same for all races — black women would die less.

According to Domingues et al. (2015), black women have the lowest rate of access to prenatal care and humanized childbirth. Data released by the MS indicate that, in 2014, 62.8% of deaths resulting from pregnancy affected black women and 35.6% white women. Among pregnant women assisted by the Unified Health System (SUS), 56% of black women and 55% of mixed race women had fewer prenatal consultations than white women. It was found that breastfeeding guidance only reached 62% of black women attended, while 78% of white women had access to the same service (BRASIL, 2018). Since 2015, the main causes of MM have been hemorrhage, especially after childbirth; infections, high blood pressure during pregnancy; complications of childbirth and unsafe abortion (SOARES, 2017; VEGA; SOARES; LORENCO, 2017).

Not only in the puerperium, but also in

prenatal care, access difficulties are still faced. From this perspective, the late recognition of racial susceptibilities can make it difficult to guide care and target interventions to reduce risks during and after pregnancy (PACHECO et al., 2018). Studies such as those by Leal et al. (2017) and Fiscella et al. (2000), corroborate this premise by verifying worse indicators of prenatal care and childbirth in black women and, mainly, a lower number of consultations for black women, resulting in impaired control of gestational morbidities, such as the reduction of monitoring of systemic blood pressure. Therefore, the process of care during pregnancy and childbirth, when not efficient, also contributes to the occurrence of unfavorable outcomes in the health process.

Difficulty in accessing health services, poverty and genetic variations can contribute to racial disparities in terms of the occurrence of Systemic Arterial Hypertension (SAH) and Diabetes Mellitus (DM). In black women, the risk of hypertension during pregnancy is fourteen times higher than that of non-black women of developing preeclampsia (MARTINS, 2006; ASSIS et al., 2008). As for DM, when associated with the black race, the risk becomes four times greater (BRITO et al., 2001). This way, unequal access to health services influences the delay in identifying risk factors, which, if not treated, can be associated with serious fetal and maternal complications, configuring an obstacle to the survival of pregnant women. Thus, Pícoli, Cazola and Lemos (2017) defend the adoption of strategies such as lines of care for black women and monitoring during prenatal care, aiming at comprehensive care and the control of morbidities.

Racial disparities in the process of care during pregnancy and childbirth contribute to the occurrence of inequities in health. Fiscella's research (2000) suggests that the current situation be modified, using as one of

the tools the inclusion of the item racial equity in health care as an indicator of the quality of services for hospital accreditation. It is understood that social policies such as income support programs can also contribute to the reduction of poverty and inequality. Therefore, it is essential that the implementation of health programs aimed at women consider the social determinants of MM, including the context in which the families are inserted, the educational level, financial condition, race/color and the place where they live (MALTA et al. al., 2016).

At the same time, it is essential to broaden the debate and awareness with the purpose of identifying and confronting the practices that potentially result in the inequities verified and that permeate educational measures aimed at health service professionals. Thus, it is necessary that studies that address the racial issue in the health area in Brazil be more stimulated, to offer subsidies to professionals, managers and the population, so that health care is equitable. Care can play an important role in mitigating health disparities, therefore, efforts to improve quality and clear guidelines for prenatal, delivery and postpartum care, free from prejudice, will expand access and quality of care. obstetric care for women (VEGA; SOARES; LORENCO, 2017).

One of the limitations of this study is the use of secondary data, due to the possibility of incomplete and duplicate information, in addition to possible underreporting of maternal deaths that are not recorded in the information systems. Despite these limitations, it must be noted that there are few studies with racial backgrounds on maternal mortality in Brazil, and this type of research is essential for the raising of hypotheses, future discussions and the elaboration of documents that support health planning and the elaboration of public policies. (MONTEIRO; MAIO, 2008; CHOR, 2013).

CONCLUSION

This study identified that the RMM increased from 2015 to 2016, despite efforts regarding the creation of health policies. The frequency of maternal deaths, especially among black women in the Northeast region of Brazil, is higher when compared to other regions of the country. In view of this, challenges still remain due to the historical fragmentation of care provided to women associated with social inequalities and racial discrimination that must be overcome, in an attempt to strengthen the country's obstetric health care services.

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