



ANALYSIS OF MATERNAL MORTALITY

ANÁLISE DA MORTALIDADE MATERNA

ANÁLISIS DE LA MORTALIDAD MATERNA

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ABSTRACT

Objective: to describe the cases of maternal. **Method:** descriptive, cross-sectional study, based on DATASUS data from the Jequié Health Region, Bahia, Brazil. **Results:** 22 cases of maternal mortality were recorded; Jequié was the municipality with the highest occurrence (n = 6, 27.3%); the maternal mortality, from direct obstetric causes, corresponded to 50% (n = 11). A high prevalence rate was observed, 45.5% (n = 10), related to low schooling; there was predominance in the age group of 30 to 39 years (n = 10, 45.5%); color / brown breed (n = 9; 40.9%); and among single women (n = 12, 54.5%). Bahia followed the same trend in terms of color / race, marital status and education: 44.9% (n = 345) had between four and 11 years of schooling, with a predominance of the age group of 20 to 29 years (n = 305 ; 39.7%). **Conclusion:** the region studied has a low prevalence of cases (2.86% of occurrences in Bahia), but they show a predominance among women with low schooling, single and brown. **Descriptors:** Descriptive Epidemiology; Maternal Mortality; Prevalence.

RESUMO

Objetivo: descrever os casos de mortalidade materna. **Método:** estudo descritivo, transversal, com base nos dados do DATASUS da Região de Saúde de Jequié, Bahia, Brasil. **Resultados:** foram registrados 22 casos de mortalidade materna; Jequié foi o município com maior ocorrência (n=6; 27,3%); a mortalidade materna, por causas obstétricas diretas, correspondeu a 50% (n=11). Observou-se elevada taxa de prevalência, 45,5% (n=10), relacionada à baixa escolaridade; houve predomínio na faixa etária de 30 a 39 anos (n=10; 45,5%); cor/raça parda (n=9; 40,9%) e entre solteiras (n=12; 54,5%). A Bahia seguiu a mesma tendência quanto à cor/raça, estado civil e à escolaridade: 44,9% (n=345) possuíam de quatro a 11 anos de estudo, havendo predominância da faixa etária de 20 a 29 anos (n=305; 39,7%). **Conclusão:** a região estudada possui uma baixa prevalência de casos (2,86% das ocorrências na Bahia), no entanto, esses mostram predomínio entre mulheres com baixa escolaridade, solteiras e pardas. **Descritores:** Epidemiologia Descritiva; Mortalidade Materna; Prevalência.

RESUMEN

Objetivo: describir los casos de mortalidad materna. **Método:** estudio descriptivo, transversal, con base en los datos del DATASUS de la Región de Salud de Jequié, Bahia, Brasil. **Resultados:** se registraron 22 casos de mortalidad materna; Jequié fue el municipio con mayor ocurrencia (n = 6; 27,3%); la mortalidad materna, por causas obstétricas directas, correspondió al 50% (n = 11). Se observó elevada tasa de prevalencia, 45,5% (n = 10), relacionada a la baja escolaridad; hubo predominio en el grupo de edad de 30 a 39 años (n = 10; 45,5%); color / raza parda (n = 9; 40,9%); y entre solteras (n = 12, 54,5%). Bahia siguió misma tendencia cuanto al color/ raza y estado civil y cuanto a la escolaridad: 44,9 % (n=345) poseían de cuatro a 11 años de estudio, habiendo predominancia de riesgo etario de 20 a 29 años (n=305; 39,7%). **Conclusión:** la región estudiada posee una baja prevalencia de casos (2,86% de las ocurrencias en Bahía), sin embargo muestran predominio entre mujeres con baja escolaridad, solteras y pardas. **Descriptores:** Epidemiología Descriptiva; Mortalidad Materna; Prevalencia.

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INTRODUCTION

The World Health Organization (WHO) defines as maternal death that occurs during pregnancy or within a period of 42 days after termination, regardless of duration or location, due to any cause related to pregnancy or by measures related to it, but, not due to accidental or incidental causes.¹

Maternal mortality is a serious public health problem, especially in developing countries, where 99% of maternal deaths occur². Studies indicate that about half of the deaths in Latin America and the Caribbean are related to hypertensive disorders and hemorrhages, with an important percentage of undefined causes. In developed countries, direct causes related to anesthesia and caesarean section are the most frequent³. At the Millennium Summit of the United Nations (UN), eight Development Goals were adopted, among them, to reduce maternal mortality by 75% by 2015.

The WHO points out that maternal mortality, in Brazil, was below the millennium goal. In 21 years, there was a significant reduction in the Maternal Mortality Ratio (MMR), from 120 per 100 thousand live births (LB), in 1990 to 64.8 per 100 thousand LB, in 2011, but, with an average annual fall velocity below the ideal of 5.5%.²

Notification problems and quality of maternal deaths have been pointed out for some years in Brazil, a fact that makes it difficult to follow up the cases and to adopt effective coping measures. However, recent data from the information systems pointed to an increase in MMR; which, in part, can be attributed to the improvement of records and capture of deaths, since the creation of the Maternal Mortality Committees.⁴

The Maternal Death Committees are interinstitutional, multiprofessional and confidential bodies that aim to identify all maternal deaths and point out intervention measures to reduce them. They aim, to raise awareness among policymakers, care institutions, health teams and the community about the severity of maternal death; increase the quantity and quality of available knowledge on the subject; evaluate the effect of interventions on morbidity, mortality and quality of women's health care; recommend appropriate actions to combat maternal deaths; and to ensure comparability of maternal mortality data at the national, regional and local levels, thus, making it possible, to identify the most vulnerable subgroups of the population.⁵

The investigation of the maternal death begins with the identification of the death and continues with the collection of data in several sources, such as the interview in the woman's home, records of health services and interviews with health professionals. These data will allow the surveillance team to reconstruct the woman's life and death history in order to better understand the problems that have occurred and the possibility of indicating measures that prevent the occurrence of new cases. In the meantime, the use of death investigation forms is essential, since the summary record has a dual function: to record the analysis or closure of the case that was investigated and to indicate the data that will be entered in the Mortality Information System (MIS).⁶

Studies suggest higher values of maternal mortality among women of lower income and education, of the black race and with little access to care, being an important indicator of living conditions and social injustice⁷. Given the above, the study of this topic has challenges that overcome individual analyzes of each case and refer to a larger dimension, that is the population and its issues of life, health and disease, in a society where there is no consensus on gender equality and reproductive rights.⁸

The State Committee for the Prevention of Maternal Mortality of Paraná (CEPMM-PR) reported in 1997 that 52.5% of maternal deaths occurred in women with income of one to four minimum wages; 86.8%, in women with one to four years and greater risk in the group between 35 to 39 years. Other studies confirm that the poorest women also, generally, have more children (four) and less access to care.⁹

Regarding the Brazilian regions, research shows that, when comparing 2000 with 2009, Brazil presented an increase of 11.92% in the absolute number of maternal deaths. This increase was different for each region, with the North presenting a growth of 15.46%; the Northeast, 18.53%; the Southeast, 10.31%; and the Midwest, 50.54% in the absolute number of maternal deaths. On the other hand, the South presented a reduction, in absolute numbers, corresponding to 15.76%. In 2009, the Northeast presented a maternal mortality ratio of 73.17 maternal deaths per 100,000 live births, a figure that surpasses the other regions of the country: 67.26; 62.09; 55.41 and 62.22, respectively for the North, Southeast, South and Central West regions.¹⁰

It is noteworthy that, despite the increase in the number of cases in some regions, with the technological increase there has been an improvement in maternal morbidity and

mortality rates associated with the increasing use of instruments and drugs in obstetric practice. There are interventions that, are effectively instituted, to reduce morbidity and mortality in this group, such as routine prophylactic antibiotic therapy, in cases of elective or emergency caesarean section, which causes a decrease in cases of septicemia; the active management of the third period, in order to avoid postpartum haemorrhage through the use of uterotonics up to two minutes after delivery; the controlled traction of the umbilical cord and abdominal uterine massage until placental delivery, among other measures.¹¹

In view of the above, the acquisition of knowledge, based on health indicators, about maternal mortality, which is still very frequent among Brazilian women, is necessary in view of the need to adopt control and prevention measures, with early detection of risk and adequate treatment of women in their pregnancy-puerperal cycle, in order to reduce the occurrence of this disease.

OBJECTIVE

- To describe the cases of maternal mortality in municipalities in the interior of Bahia, in the period 2010-2014.

METHOD

A quantitative, descriptive, cross-sectional study of a series of cases, based on the data available in the Department of Informatics of the Unified Health System (DATASUS) of the Region of Health of Jequié, Brazil, according to the Regional Inter- (CIR), available in the Mortality Information System (SIM), in the period from 2010 to 2014. The year 2014 was the most current within this information system and this time cut was chosen so that, the data presented and analyzed would represent, the reality in question. Data from DATASUS were accessed in October 2016.

The target population of this study consisted of the women, residents of the Jequié-BA Health Region, which presented maternal death as a pregnancy or puerperium outcome and were recorded in DATASUS. The Jequié-BA Health Region, has 25 municipalities: Aiquara, Apuarema, Barra do Rocha, Boa Nova, Brejões, Craveiro, Dário Meira, Ibirataia, Ipiaú, Irajuba, Iramaia, Itagi, Itagibá, Itamari, Itaquara, Iquique, Jiquié, Jitaúna, Lafaiete Coutinho, Lajedo do Tabocal, Manoel Vitorino, Maracás, Planaltino and Santa Inês, all located in the southwestern and southern regions of Bahia,

with Jequié municipality as a reference pole¹².

The municipality of Jequié is located in the southwest region, 365 km from Salvador, the state capital, with approximately 161,880 thousand inhabitants, and has health services in the three spheres of complexity.¹³

Although this region has 25 municipalities, only 11 of them were found maternal deaths, between the years 2010 to 2014, which may be related to the non-existence of the same, as well as to the absence of notification of the cases, in the non-referred municipalities in the results.

Among the variables provided by the aforementioned information system, the total number of deaths per municipality was described; deaths investigated with informed synthesis; deaths not investigated; by type of obstetric cause - direct, indirect and non-specific maternal death; per period of maternal death (during pregnancy, delivery or abortion, during the puerperium, up to 42 days, during the puerperium, 43 days to less than one year, and deaths not reported or ignored); schooling level; age group; color / race and marital status.

RESULTS

In the period from 2010 to 2014, 22 cases of maternal mortality were registered in the Jequié health region; in Bahia, 768 cases occurred in the same period, so the region mentioned above represents 2.86% of the total number of records. The municipalities with the highest number of cases were Jequié (n = 06, 27.27%); Jaguaquara (n = 04, 18.18%) and Maracás (n = 03, 13.63%).

In the historical series of the five years analyzed (2010-2014), both Bahia, and the health region of Jequié maintained the percentage variation. For the former, these values ranged from 1.34 to 9.26%. In Jequié, there was a 100% increase in cases between 2010 and 2011, but the number remained stable in the other years.

The percentage distribution of maternal death investigations, in this time cut, indicated that most cases occurred in the study region (n = 20, 90.9%), while only 9.1% (n = 2) did not were investigated. The data collected subdivided the maternal mortality as to the type of obstetric cause, direct, indirect and unspecified. The first one represents 50% of the cases (n = 11), while the others were identified in the percentiles of 40.9 (n = 9) and 9.09 (n = 2) respectively (Table 1).

Table 1. Cases of maternal mortality, according to the investigation and type of cause, in municipalities of the Health Region (CIR). Jequié (BA), Brazil, from 2010 to 2014.

Municipality	Total of deaths/ munic.	Death invest.*, with synthesis record	Death invest., without synthesis record	Death not invest.	Type cause obst.: Death mat. obst. dir.**	Type cause obst.: Death mat. obst. indir	Type cause obst.: Death mat. obst. non specif.***
Total of the Region	22	20	-	2	11	9	2
Boa Nova	2	2	-	-	1	1	-
Brejões	1	1	-	-	-	1	-
Ipiaú	1	1	-	-	1	-	-
Iramaia	1	1	-	-	1	-	-
Itamari	1	1	-	-	-	1	-
Itiruçu	1	1	-	-	-	1	-
Jaguaquara	4	4	-	-	-	2	2
Jequié	6	4	-	2	3	3	-
Jitaúna	1	1	-	-	1	-	-
Lajedo do Tabocal	1	1	-	-	1	-	-
Maracás	3	3	-	-	3	-	-
BAHIA	768	558	49	161	479	261	28

* Investigated death / ** Type obstetrical cause: Obstetric maternal death / *** unspecified
Source: DATASUS

Regarding the period of maternal death, the data indicate that, during the puerperium, up to 42 days, 54.55% (n = 12) died. During pregnancy, delivery or abortion, there were

31.82% (n = 7) and, during the puerperium of 43 days and less than one year, they were 9.09% (n = 2) (Table 2).

Table 2. Cases of maternal mortality, according to the period of occurrence, in municipalities of the Health Region (CIR). Jequié (BA), Brazil, from 2010 to 2014.

Municipality	Death preg/pue: During pregnancy, delivery or abortion	Death preg/pue: During the puerperium, up to 42 days	Death preg/pue: During puerperium, from 43 days to <1 year	Death preg/pue: Uninformed or ignored	Death not in pregnancy or puerperium	Informed period Inconsist.
Total of the Region	7	12	2	1	-	-
Boa Nova	-	1	1	-	-	-
Brejões	-	1	-	-	-	-
Ipiaú	-	1	-	-	-	-
Iramaia	-	1	-	-	-	-
Itamari	-	1	-	-	-	-
Itiruçu	1	-	-	-	-	-
Jaguaquara	3	1	-	-	-	-
Jequié	2	3	1	-	-	-
Jitaúna	-	-	-	1	-	-
Lajedo do Tabocal	-	1	-	-	-	-
Maracás	1	2	-	-	-	-
BAHIA	271	350	64	63	14	6

Source: DATASUS

Moreover, in the analyzed period, the level of schooling, in the Jequié region, presented a percentage difference in cases of maternal mortality, in which women who had up to three years of schooling obtained 45.45% (n =

10) of deaths, whereas those that were identified with education of four years or more represented 31.82% of the cases (n = 7) (Table 3).

Table 3. Maternal mortality cases, according to schooling, in municipalities of the Health Region (CIR). Jequié (BA), Brazil, 2010 to 2014.

Municipality	Education : None	Education : 1 to 3 years	Education : 4 to 7 years	Education : 8 to 11 years	Education : 12 or more	Education: Ignored
Total of the Region	3	7	4	3	-	5
Boa Nova	-	-	1	-	-	1
Brejões	-	1	-	-	-	-
Ipiaú	-	-	-	-	-	1
Iramaia	-	-	1	-	-	-
Itamari	-	-	1	-	-	-
Itiruçu	-	-	-	-	-	1
Jaguaquara	-	1	1	1	-	1
Jequié	2	3	-	1	-	-
Jitaúna	-	1	-	-	-	-
Lajedo do Tabocal	1	-	-	-	-	-
Maracás	-	1	-	1	-	1
BAHIA	35	110	166	179	44	234

Source: DATASUS

The age group was another analyzed indicator that presented differentiated percentiles, since women, who were between 30 and 39 years of age, were represented with 45.45% (n = 10) of the deaths. The age group from 15 to 19 years old presented 9.09% (n = 2); 20-29 years, 27.27% (n = 6) and 40-49 years, 18.18% (n = 4) (Table 4).

Table 4. Cases of maternal mortality, by age group, in municipalities of the Health Region (CIR). Jequié (BA), Brazil, 2010 to 2014.

Municipality	Age group: 10 to 14 years	Age group: 15 to 19 years	Age group: 20 to 29 years	Age group: 30 to 39 years	Age group: 40 to 49 years	Age group: 50 to 59 years	Age group: Ignored
Total of the Region	-	2	6	10	4	-	-
Boa Nova	-	-	1	1	1	-	-
Brejões	-	-	-	-	-	-	-
Ipiaú	-	-	1	-	-	-	-
Iramaia	-	-	-	1	-	-	-
Itamari	-	-	1	-	-	-	-
Itiruçu	-	-	-	-	1	-	-
Jaguaquara	-	1	2	1	-	-	-
Jequié	-	1	1	4	-	-	-
Jitaúna	-	-	-	-	1	-	-
Lajedo do Tabocal	-	-	-	1	-	-	-
Maracás	-	-	-	2	1	-	-
BAHIA	11	91	305	286	72	2	1

Source: DATASUS

Regarding color / race, the distribution of maternal deaths in the health area between 2010 and 2014 showed that 40.91% were brown: 13.64%, white; 18.18%, black and, in 27.27%, this information ignored. Marital status also showed heterogeneity in the distribution of maternal mortality, in which single women corresponded to 54.55% (n = 12), while married women were represented in 9.09% (n = 2); others, in 13.64 % (n = 3) and ignored, in 22.73% (n = 5) (Tables 5).

Table 5. Cases of maternal mortality, according to the marital status in municipalities of the Health Region (CIR). Jequié (BA), Brazil, 2010 to 2014.

Municipality	Marital status: Single	Marital status: Married	Marital status: Judicially separated	Marital status: Other	Marital status: Widow	Marital status: Ignored
Total of the Region	12	2	-	3	-	5
Boa Nova	2	-	-	-	-	-
Brejões	-	-	-	-	-	1
Ipiaú	-	-	-	-	-	1
Iramaia	1	-	-	-	-	-
Itamari	1	-	-	-	-	-
Itiruçu	-	-	-	-	-	1
Jaguaquara	3	1	-	-	-	-
Jequié	4	1	-	-	-	1
Jitaúna	-	-	-	1	-	-
Lajedo do Tabocal	-	-	-	-	-	-
Maracás	1	-	-	2	-	1
BAHIA	368	176	7	75	4	138

Source: DATASUS

DISCUSSION

In the period from 2010-2014, 22 maternal deaths were registered in the Jequié Health Region according to data from DATASUS, most of them in the municipality of Jequié (n = 6, 27.3%). In 90.9% (n = 20) of the cases, 90% of the cases were investigated, demonstrating that, although the investigation was not performed in 100%, which would be ideal, there was a good information collection about the deaths that occurred, it is essential to understand the causes and lead to the adoption of preventive measures in order to avoid future occurrences. However, it is worth mentioning that, in 14 municipalities, no records of maternal deaths were found, which can be attributed both to the absence of occurrences such as, also, non-notification of cases.

In relation to Bahia, it is verified, among occurrences, the investigation with a summary report was reported in 72.6% (n = 558) of the cases, which reveals that the health region under study has an average of research well above that performed in the State, and a high percentage of uninvestigated cases (n = 161, 20.9%) were still observed in Bahia.

In Brazil, the difficulties in measuring maternal mortality have been widely documented. The inaccuracies in the registry generate underreporting and under-registration of maternal deaths, which requires the adoption of a correction factor. Since the 1990s, the Ministry of Health has promoted studies to estimate this factor, with the application of the RAMOS (Reproductive Age MortalitySurvey) methodology.¹⁴

This methodology identifies and investigates the causes of all deaths of women of childbearing age (FIM), in a defined area and population, using multiple data sources, such as interviews with the family, midwives, gravediggers and health professionals who attended the woman, as well as the collection of vital records data, medical records and burial information. Thus, the relationship between the number of maternal deaths obtained by the investigation and the number reported in the original Death Certificates made it possible to estimate the RMM corrected values.¹⁴

MMR estimates the frequency of deaths of women during gestation or up to 42 days after termination of pregnancy regardless of the duration or location of the pregnancy¹⁵. RMM represents a small share compared to the considerable number of women who develop severe maternal morbidities. Maternal mortality usually occurs after a succession of morbidities that, if detected in time to take the necessary steps, could often prevent deaths.¹⁶

In this study, direct obstetric maternal death represented the highest number of cases in the region (n = 11, 50%), and in Bahia (n = 479, 62.4%), when compared to indirect obstetric maternal death and unspecified obstetric maternal death. Direct obstetric maternal death is understood to be that occurring due to obstetric complications during pregnancy, childbirth or the puerperium, due to interventions, omissions, incorrect treatment or a chain of events resulting from any of these causes; and indirect obstetric maternal death is that resulting from diseases that existed before

pregnancy or that developed during this period, aggravated by the physiological effects of pregnancy.¹⁷

In Brazil, more than 90% of deliveries occur in hospitals. In Brazilian capitals, 67.1% of maternal deaths were due to direct obstetric causes. The specific diagnoses that predominated were hypertensive disorders, present in 25% of the cases. Pregnancy-specific hypertensive disease (pre-eclampsia and eclampsia) accounted for 37% of all direct obstetric deaths. Hemorrhagic complications accounted for 9% of the total and 13.3% of direct obstetric deaths. However, about a quarter of the deaths were due to indirect obstetric causes.¹⁸⁻⁹ These data indicate that the qualification of care in Brazilian institutions should focus on both the causes of death directly related to pregnancy, and the clinical conditions prior to gestation.

Still in Brazil, it can be pointed out that the risk of dying from direct obstetric causes in 2012 was 40.7 maternal deaths per 100,000 live births and 19.4 deaths from indirect causes. The two main direct causes of maternal death in Brazil are hypertension and hemorrhage, which corresponded to 20.2% and 11.9% of all maternal deaths, respectively. Other important direct obstetric causes are puerperal infection and abortion, which corresponded respectively to 7.3% and 4.5% of total maternal deaths. Among the indirect causes, the most frequent group was those of diseases of the circulatory system complicated by gestation, childbirth or the puerperium, which represented 7.3% of all maternal deaths.¹⁴

It could also be verified, from the data analyzed in the research, that the highest number of deaths occurred during the puerperium up to 42 days postpartum, representing 54.5% (n = 12) of the deaths in the health region of Jequié and 45, 6% (n = 350) in Bahia.

However, although the prevalence of deaths in the data observed occurred in the period closest to the birth, it is noted that the technological evolution, including the therapy, caused that serious complications occurred in the puerperal pregnancy cycle did not lead to death before of the puerperium (42 days), but that it would occur later. This led the WHO to include, in the International Code of Diseases (ICD-10), codes for "death from any obstetric cause occurring more than 42 days but less than one year after giving birth."¹³ This justifies the occurrence of 9% (n = 2) of maternal deaths in the Jequié region and 8.3% (n = 64) in Bahia occurred within 43 days to one year after delivery.

Regarding schooling, it was evidenced, in the mentioned health region, that 45.5% (n = 10) of the occurrences occurred among women with no schooling or with up to three years of study. In Jequié, this percentage reached 83, 3% (n = 5). It is worth noting that the number of cases, with neglected schooling (n = 5; 22.7%) is still large, in this region, showing the fragility in data collection, which makes it difficult to acquire information for the establishment of extremely important health indicators to guide the control / prevention actions. In Bahia, the level of schooling, among women who died due to maternal causes improved. About 50.6% (n = 345) of them had more than four years of schooling, but, there was a high rate of schooling ignored (n = 234, 30.5%).

Schooling is a variable that must be considered in women's health care, since surveys show, that women with lower levels of education, are the main victims of maternal mortality. This data indicates that women with low schooling are possibly not being adequately assisted, nor are the risks of death being corrected.²⁰

The Ministry of Health states that high RMM are indicative of the low level of information and education, as well as precarious socioeconomic conditions, family dynamics with the presence of violence and difficulties in accessing quality health services. Likewise, the transfer of information is one of the useful weapons when the objective is the prevention of diseases and the promotion of health, so that the ability of the message recipient to understand information, as well as the way health guidelines are passed on, influencing the achievement of positive end effects.⁷

Another important indicator to be analyzed is the age group. In the region under study, the highest number of maternal deaths was among women aged 30 to 39 years (n = 10, 45.5%). In Jequié, this group corresponded to 66.6% (n = 4) of the cases. In Bahia, the most affected age group was between 20 and 29 years (n = 305, 39.7%). This data reveals that, in the health region of the study, the highest number of cases occurs among the more mature women, contrary to the trend that occurs in Bahia and in the country, where there is a predominance of the 20-29 age group.

In Brazil, in 2012, 14% of all maternal deaths occurred in women under 20 years of age, 77.1% in the 20-39 age group; and 8.7% in women 40 years of age or older. The North Region had the highest concentration of deaths in women under 20 years (20.2%) and the Center-West Region, the lowest (11.4%). It

is worrying that 14% of maternal deaths are occurring in adolescents, with a higher concentration in the North, Northeast and Center-West regions, which have a larger contingent of women with difficulty accessing social assets.¹⁴

It is worth noting that women of ten to 49 years of age are considered to be of childbearing age.²² However, in the analysis of maternal mortality in Brazil, from 2010 to 2014, some sporadic cases exceeded the conceptual age range, with maternal deaths ranging from 50 to 59 years old in the Southeast and Northeast regions, including, two occurrences in Bahia (0.26%).¹⁰ This fact leads us to believe that there are deficiencies in the records, which demonstrates the need for permanent education in the health services, so that reporting errors are becoming smaller, making the data qualified to generate reliable information that can, in fact, subsidize health interventions.

Regarding color / race, both the Jequié region and Bahia, showed a remarkable predominance of brown, with values of 40.9% (n = 9) and 61% (n = 469), respectively. Then, the color / breed most reported in Bahia was black, with 17.7% (n = 136), being verified, in the Jequié region, that 27.3% (n = 6) of the cases were ignored, revealing an inconsistency of the data in this region for the evaluation of this indicator.

It is observed that most of the maternal deaths correspond to women of color or black race, that is that made up of people who declare themselves black and those who declare themselves as brown. This proportion has been increasing over the years, which can also be attributed, also, to improving the quality of information about skin color or race among maternal deaths, with a constant reduction of "ignored", which allows to show, with greater truth and proximity, the real picture in the country, where the largest contingent of maternal deaths are black women, thus, highlighting, the vulnerability of this group.¹⁴

However, the analysis of race and color is not an easy action given the difficulty of understanding while the race / color classification. It is on the basis of this that some people defend the fact that this classification should not exist, since ethnic diversity is Brazil's most striking identity, with a distorted portrait of the country's true social reality, interfering with and hindering the concrete analysis of the population and its morbidity and mortality profile.⁸

Regarding marital status, 54.5% (n = 12) of the occurrences in the Jequié health region

were unmarried, a trend also observed in Jequié, with 66.6% (n = 4), and in Bahia, with 47.9% (n = 368). The ignored marital status appears in both the study region, and Bahia, with 22.7% (n = 5) and 18% (n = 138) respectively, once again demonstrating the fragility of information collection.

Marital status is an indicator that needs to be analyzed, since among registered maternal deaths a higher percentage of single mothers, were found. In this case, it is worth reflecting on the unformalized and / or open marital relationships, since it is common the consequent breakdown of ties between the mother and the father of the baby and / or the making of decisions inconvenient in the discovery of a pregnancy. Thus, it is believed that single pregnant women, as well as widows and judicially separated, tend to constitute a vulnerable group. The justifications for this are based on the absence of affective, emotional, social, financial and stimulating self-care for the mother by the baby's father and the family.¹⁰

In general, the analysis of maternal mortality in Brazil, has identified that there are social inequalities related to color / race, schooling and marital status. Failures are also pointed out in prenatal care at delivery, in the avoidable causes of maternal death, noting that incomplete completion and underreporting in the death certificate still persists in the country,²² which corroborates with the situation in the region under study.

It should be noted that the underreporting and underreporting of maternal deaths in the country, with absence of completion in the various fields, makes it difficult to analyze more accurately the variables present in the Declaration of Death. As a consequence, the monitoring of events to verify the effectiveness of women's health actions is hampered by the available data, which justifies the need for sensitization and training of the professionals who report these deaths.

CONCLUSION

The improvement of reproductive health conditions is a challenge, since the risk situations reach, mainly, women with little access to health services, generally, associated, with low schooling. This requires quality prenatal care and delivery, effective social control with expansion and qualification of Maternal Death Committees, and the mobilization of managers, health professionals and civil society in the promotion of public policies that seek reduction of maternal mortality.

Equally necessary is to sensitize health professionals and managers to the importance of reliable recording of maternal deaths and the need to adequately feed the information systems in force in Brazil. Underreporting generates information incompleteness and consequently, makes policy planning of action difficult. The study of the determinants of maternal mortality, with a focus on the most vulnerable groups, should also be expanded in order to combat the factors that contribute to the perpetuation of this health inequity, making scientific production even more relevant in facing this serious event among Brazilian women.

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