

## Anti-Black racism and maternal death from COVID-19: what have we seen in the Pandemic?

Emanuelle Freitas Góes (<https://orcid.org/0000-0001-9288-6723>)<sup>1</sup>

Andrêa J.F. Ferreira (<https://orcid.org/0000-0002-6884-3624>)<sup>1</sup>

Dandara Ramos (<https://orcid.org/0000-0001-9162-0456>)<sup>1</sup>

**Abstract** *Anti-Black Racism traverses the lives of Black and Brown women, compromising sexual and reproductive health. Obstetric racism during pregnancy, prenatal care, childbirth, abortion, and puerperium affects these women, exposing them to harmful and often lethal maternal outcomes. This study aims to present racism and its manifestations in maternal death by COVID-19. It included data from COVID-19 notifications among pregnant women and puerperae recorded in the severe acute respiratory syndrome database (2021 and 2022). Information on race/skin color, age, region, clinical signs and symptoms, ICU, and deaths were collected. The results indicate how racism affects Black and Brown pregnant women and puerperae, who have higher lethality due to COVID-19 compared to White women (a difference of 14.02%), particularly in the puerperium. Black and Brown pregnant women least accessed the ICU. After adjustments, maternal death in the puerperium for Black women was 62% more likely than for White women (OR=1.62; 95%CI: 1.01-2.63). Racism and its manifestations (dis)organize the reproductive trajectories of Black and Brown women, whose interaction with sexism contributes to harmful and lethal maternal outcomes by COVID-19.*

**Key words** *Racism, Obstetric Racism, Sexual and Reproductive Health, Maternal Mortality, COVID-19*

<sup>1</sup> Centro de Integração de Dados e Conhecimentos para a Saúde, Fiocruz-Bahia. R. Mundo 121, Trobogy. 41745-715 Salvador BA Brasil. [emanuelle.goes@fiocruz.br](mailto:emanuelle.goes@fiocruz.br)

## Introduction

Racism is a structural determinant of living conditions and access to health services. In obstetric care, the manifestation of racism carries a historical legacy of violence, torture, and experiments on the bodies of Black women, which is why it is called obstetric racism<sup>1,2</sup>. Performing procedures without anesthesia, attention, and care because Black women were and are considered more resistant are examples of racist obstetric practices in the colonized interpretation of humanity<sup>2,3</sup>. The world's structure hierarchizes humanity, defining humans (whites) and sub-humans (Blacks and Indigenous)<sup>4</sup>. Anti-Blackness is the foundation of humanity, as its definition excludes those considered non-people, resulting in the denial of the Black individual<sup>5</sup> under a historical-political-ideological pact of anti-Black genocide.

“Let live and let die”<sup>6</sup> is loaded with implicit racial bias, a set of historical and social stereotypes that focus on the Black population and racially oppressed groups and may be subtle and accidental. Decision-making in obstetric care is often based on implicit racial bias, which affects the delivery of care to Black women in health services.

Racism is an institutionalized system of oppression that assigns value and hierarchizes people based on race/ethnicity<sup>7,8</sup>. For this reason, Black women delay the search for health services, considering the individual and collective experiences of discrimination, prejudice, and institutional violence. Institutional racism manifests itself even before entering the service, interfering with the decision to seek care, often putting them in an extreme situation regarding health conditions<sup>9</sup>. Also, Black women live on the outskirts, on the sidelines, in segregated neighborhoods, living in worse living conditions, where the provision of health services is precarious.

Obstetric racism lies at the intersection between obstetric violence and institutional racism. It is characterized by the aggravation of violence suffered because of the racial belonging of health service clients and the ideology of racial hierarchies, which influence treatment or diagnostic decisions<sup>10</sup>. Anti-Black racism accompanies Black women during pregnancy, prenatal care, childbirth, abortion and the postpartum period.

The several manifestations of racism harm women, with negative and often lethal maternal outcomes<sup>11-13</sup>. Impoverished countries with deep inequalities have high maternal mortality rates, far from the targets established by the World

Health Organization<sup>14</sup>. In most cases, maternal death is a preventable lethal event, reaching 90%. However, as we have a society that defines humanity criteria, it will almost always be lethal and unavoidable harm for Black and Indigenous women.

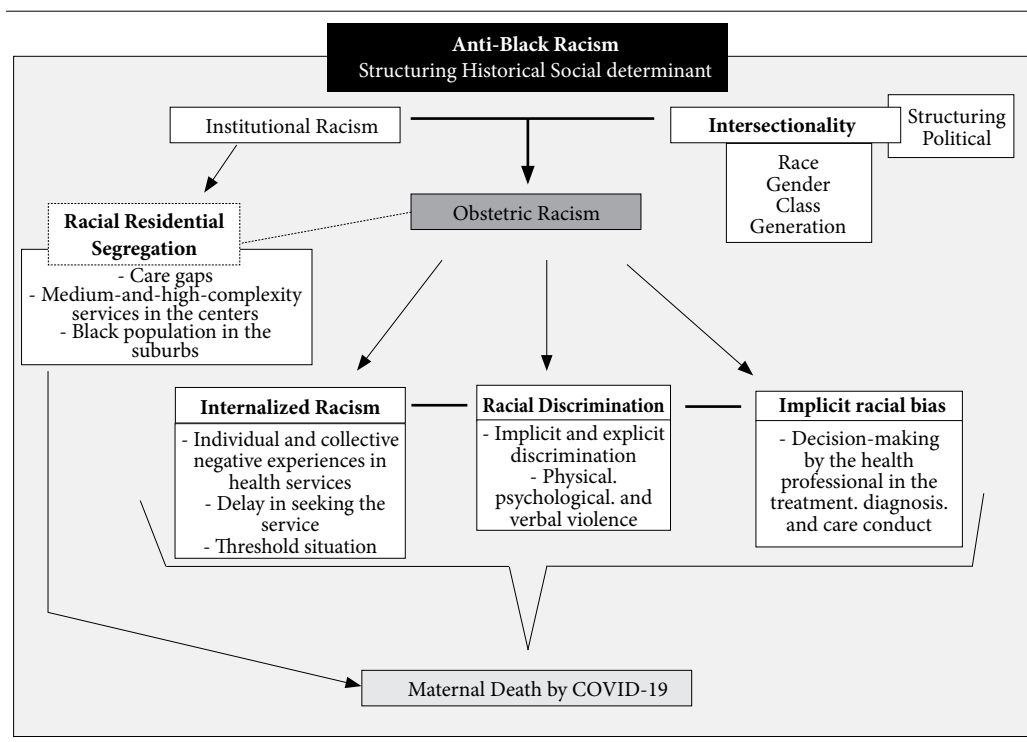
With the COVID-19 pandemic, the picture of maternal death has deteriorated in Brazil and several countries, and Black women and people from racially oppressed groups are the main victims. When the new coronavirus pandemic took hold in the country, it previously uncovered stagnation, followed by setbacks concerning the sexual and reproductive rights agenda, in particular maternal deaths, which have not seen a significant reduction in recent years. In 2020, due to the COVID-19 pandemic, there was a 20% increase in these deaths, followed by a double increase in this rate in the subsequent year (7.4% in 2020 and 15.6% in 2021)<sup>15</sup>.

The pandemic has, directly and indirectly, become a threat to the sexual and reproductive rights of women and girls and access to sexual and reproductive health services (reproductive planning, prenatal care, childbirth, abortion, and puerperium), expanding pre-existing barriers to accessing these services<sup>16</sup>. They are Black and Indigenous women from suburban regions and younger women, those previously exposed and who experience these barriers in the previous and current context. Figure 1 represents the theoretical model for understanding the interrelationships between anti-Black racism and the other dimensions of racism and its effect on maternal death from COVID-19.

Therefore, this paper aims to analyze racial inequalities in lethality and the likelihood of death due to Severe Acute Respiratory Syndrome among cases diagnosed with COVID-19 in pregnant women and puerperae in 2021 and 2022, considering the race variable an analytical and historical category that represents a proxy for the study of racism.

## Methods

This exploratory, cross-sectional study was developed from the Severe Acute Respiratory Syndrome Databases, including COVID-19 data referring to Severe Acute Respiratory Syndrome (SRAG) Surveillance of the Ministry of Health, through the Health Surveillance Secretariat (SVS) and Acute Respiratory Syndrome surveillance for 2021 and 2022 (<https://opendatasus.saude.gov.br/>



**Figure 1.** Theoretical-conceptual model of the relationships of racism and maternal death by COVID-19.

Source: Authors.

dataset/srag-2021-e-2022). Data referring to 2020 were not used due to the quality of completing the race/skin color item in that period<sup>17,18</sup>.

The extracted data refer to reports of Severe Acute Respiratory Syndrome – including COVID-19 data from January 1, 2021, to February 21, 2022 –, totaling 1,715,835 reported cases. Because it is a de-identified and open-access database, the present study did not require approval by an ethics committee.

### Sample

This study included notifications of COVID-19 cases (“SARS by COVID-19” option in the “classi\_fin” field) with a registered clinical outcome (cure or death), with Black, Brown or White race/skin color, pregnant women (positive response to field “cs\_gestant” – options first, second, and third trimester, or unknown gestational age; N=8,244), and puerperae (positive response to field “puerperae”; N=2,501), totaling 10,745 cases. Considering the small sample size of Indigenous and Asian descent among pregnant women (39 Indigenous and 61 of Asian descent)

and puerperae (15 Indigenous and 13 of Asian descent), these groups were not included in the data analyses. These analyses considered only the groups of Black, Brown, and White women, corresponding to 82.8% of the initial sample of positive COVID-19 cases in women with registered outcomes.

### Study variables

**Sociodemographic variables:** age (in years), race/skin color, and region (North, Northeast, Southeast, South, and Midwest).

**Signs and symptoms:** the signs and symptoms listed in the notification form were considered, namely fever, cough, sore throat, dyspnea, respiratory distress, O<sub>2</sub> saturation <95%, diarrhea, vomiting, abdominal pain, fatigue, loss of smell, loss of taste, and another symptom.

**Risk factors:** the risk factors listed in the notification form were considered as follows: chronic cardiovascular disease, chronic hematological disease, Down syndrome, chronic liver disease, asthma, diabetes mellitus, chronic neurological disease, chronic lung disease, immunodeficiency or

immunosuppression, chronic kidney disease, obesity, and other risk factors. From this set of variables, the total number of risk factors was calculated (sum of positive responses to the twelve risk factors, integer variable ranging from zero to 12).

ICU: indicative that the patient was admitted to the intensive care unit.

Death due to SARS: deaths recorded in the field “development” were coded, assigning the value one to deaths (option 2 “Death” in the notification form) and zero to other outcomes (“Cure” or “Death due to other causes”).

### Data analyses

Data were processed using STATA software version 13.0. Descriptive statistics were calculated for the entire sample and specific to groups of pregnant women, puerperae, and other women, categorized by race/skin color. Lethality was calculated by dividing the total number of SARS deaths by the total number of confirmed COVID-19 cases. The chi-square test was used to compare lethality between racial groups.

Simple and multiple logistic regression models were estimated (adjusted for age group, ICU stay, and the sum of risk factors) to analyze racial inequalities in the risk of death from SARS, considering the independent variable race/skin color as exposure of interest.

## Results

### Characterization of women hospitalized due to COVID-19

Table 1 describes sociodemographic characteristics, signs and symptoms, risk factors, and ICU admission among pregnant and puerperae included in the study by race/skin color. The age distribution between racial groups differs significantly among pregnant women ( $\chi^2_8=43.81$ ;  $p<0.05$ ), with a higher percentage of pregnant adolescents among Black and Brown women than white women. Significant differences were also found among puerperae, with a higher percentage of adolescent mothers among Brown women ( $\chi^2_8=38.63$ ;  $p<0.05$ ).

When evaluating the risk factors presented by the women, differences between the racial groups for pregnant women are noted, with 50.44% of the Black women declaring at least one risk factor, compared to 48.72% of the White women and 46.27% of Brown women ( $\chi^2_2=6.24$ ;  $p<0.05$ ), and

among puerperae, with 48.97% of Black women declaring risk factors versus 41.01% of white women and 34.64% of Brown women ( $\chi^2_2=17.66$ ;  $p<0.05$ ) (Figure 2). Among the specified risk factors (not listed in the “Other” category), the most prevalent were diabetes, obesity, chronic cardiovascular disease, and asthma, both for pregnant women and puerperae. Significant differences between racial groups were identified in the prevalence of obesity among pregnant women ( $\chi^2_2=11.97$ ;  $p<0.05$ ). The percentage among Black women was the highest (31.34%), followed by White (25.11%) and Brown (21.94%).

The percentage of pregnant women referred to the ICU differed significantly between racial groups ( $\chi^2_2=10.80$ ;  $p<0.05$ ), with a higher proportion among White pregnant women (35.50%), followed by Black (32.19%) and Brown women (31.94%). Differences were also identified among puerperae, with a higher percentage of ICU admissions for Black women (55.15%), followed by Brown (46.27%) and White women (42.45%) ( $\chi^2_2=8.98$ ;  $p<0.05$ ).

### Lethality

A total of 1,308 deaths were identified in the final study sample. The highest lethality was identified among Black women, accounting for 99 deaths (17.9%), followed by Brown (736 deaths; 15.1% lethality) and White women (593 deaths; 13.3% lethality). The result of the chi-square test confirmed the existence of statistically significant differences in lethality between the racial groups ( $\chi^2_2=12.04$ ;  $p<0.05$ ) (Data not shown in the tables).

Specific lethality among pregnant women and puerperae is shown in Figure 3. The chi-square test did not indicate significant differences between racial groups for pregnant women ( $\chi^2_2=3.10$ ;  $p>0.05$ ). However, the results were significant when comparing the racial groups for puerperae ( $\chi^2_2=12.13$ ;  $p<0.05$ ), indicating higher lethality among Black women (36.28%) compared to White women (22.26%).

### Racial inequalities in death

Among pregnant women, no significant difference was found in the likelihood of death between white and Black women, both in the crude model (OR=1.22; 95%CI: 0.91-1.64) and after adjusting for age group, ICU admission, and the sum of risk factors (OR=1.38; 95%CI: 0.97-1.98). Comparing White and Brown women, the

**Table 1.** Sociodemographic characteristics, signs and symptoms, risk factors and ICU admission of COVID-19 cases among pregnant women and puerperae hospitalized for Severe Acute Respiratory Syndrome, by race/skin color, January 2021 to February 2022, Brazil.

Selected variables	Pregnant women				Puerperae			
	Black (N=454)	Brown (N=4,085)	White (N=3,705)	Total (N=8,244)	Black (N=145)	Brown (N=1,305)	White (N=1,051)	Total (N=2,501)
	%	%	%	%	%	%	%	%
Age group								
<10	0.00	0.24	0.13	0.18	0.00	0.08	0.10	0.08
10-19	6.17	7.96	4.86	6.47	6.21	10.73	4.76	7.96
20-34	70.93	68.62	68.42	68.66	57.24	62.38	63.84	62.69
35-49	20.70	21.37	24.91	22.93	26.90	19.85	21.03	20.75
>49	2.20	1.81	1.67	1.77	9.66	6.97	10.28	8.52
Region								
North	9.03	19.71	2.13	11.22	8.97	21.76	1.43	12.48
Northeast	10.35	30.33	4.02	17.41	13.10	33.72	4.38	20.19
Southeast	55.51	28.52	48.64	39.05	52.41	27.89	51.09	39.06
South	14.54	3.84	37.11	19.38	16.55	2.84	35.49	17.35
Midwest	10.57	17.6	8.10	12.94	8.97	13.79	7.61	10.92
Signs and symptoms								
Fever	64.53	62.22	62.35	62.41	45.26	55.43	52.37	53.49
Cough	79.85	79.19	79.06	79.17	73.53	70.99	71.23	71.24
Sore throat	28.18	28.18	28.82	28.47	25.84	25.43	26.79	26.07
Dyspnea	69.95	68.99	71.39	70.13	76.92	70.35	67.26	69.37
Respiratory distress	54.78	57.49	58.61	57.84	60.42	61.08	56.56	59.02
O <sub>2</sub> saturation <95	54.62	48.02	58.93	53.41	65.31	61.34	61.58	61.68
Diarrhea	15.36	12.36	15.79	14.08	7.95	10.09	13.38	11.47
Vomiting	14.24	13.46	15.48	14.42	6.90	9.41	8.75	8.96
Abdominal pain	10.06	11.11	11.94	11.43	8.14	10.08	8.82	9.40
Fatigue	33.85	33.18	39.53	36.10	34.09	31.95	34.83	33.40
Loss of smell	21.50	21.21	21.79	21.49	12.94	14.75	15.91	15.18
Loss of taste	20.25	20.15	20.04	20.10	18.82	13.66	16.26	15.14
Other symptoms	51.55	55.20	52.38	53.72	44.94	43.40	42.32	43.01
Risk factors								
Cardiovascular disease	22.90	19.00	18.38	18.92	21.43	21.38	16.49	19.05
Chronic hematologic disease	2.46	1.72	1.04	1.42	2.53	2.91	2.63	2.75
Down's syndrome	0.00	0.43	0.09	0.24	1.25	1.62	1.85	1.71
Chronic liver disease	0.00	0.54	0.47	0.48	1.30	1.30	1.55	1.42
Asthma	8.20	10.26	11.21	10.62	6.17	7.40	6.51	6.90
Diabetes	26.32	22.75	25.29	24.23	20.99	14.06	13.46	14.18
Chronic neurological disease	4.10	1.51	1.90	1.86	3.80	1.94	3.40	2.75
Chronic lung disease	0.83	2.15	2.37	2.18	1.28	3.08	2.16	2.53
Immunodeficiency or immunosuppression	1.65	1.73	2.67	2.19	5.19	2.61	2.32	2.62
Chronic kidney disease	4.07	1.65	1.43	1.68	1.30	3.42	3.11	3.15
Obesity	31.34	21.94	25.11	24.09	18.52	14.73	15.24	15.20
Other risk factors	79.65	82.84	77.95	80.32	32.14	27.52	26.11	27.14
ICU admission	32.19	31.94	35.50	33.59	55.15	46.27	42.45	45.18

Source: Authors.

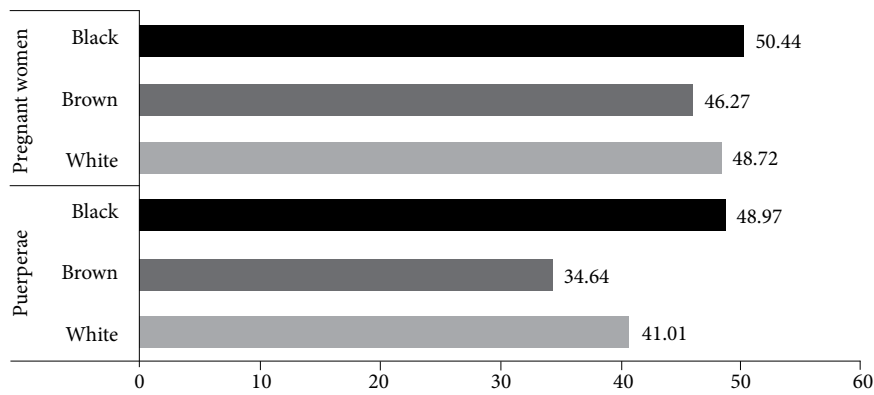
likelihood of death for Brown pregnant women was 38% higher than for White women after controlling for the study's covariates (OR=1.38; 95%CI: 1.16-1.63).

In the analysis of puerperae, differences between White and Black women were significant in the crude model (OR=1.86; 95%CI: 1.28-2.71) and after adjusting for covariates, indicating a 62% increase in the likelihood of death for Black

women compared to White women (OR=1.62; 95%CI: 1.01-2.63) (Table 2).

**Discussion**

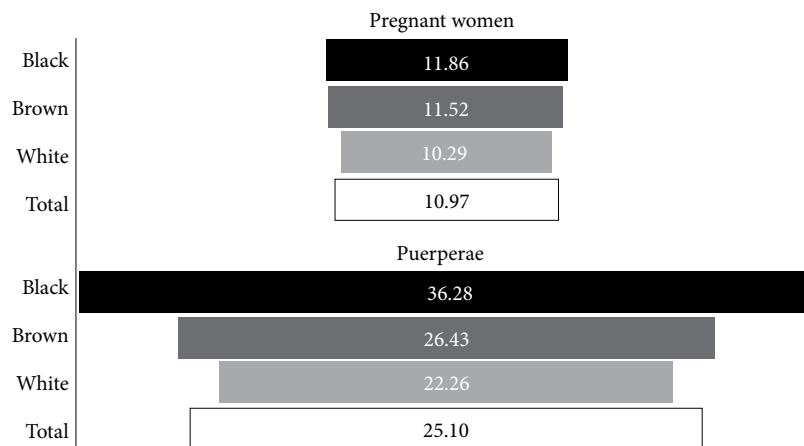
The results of this study show how racism and racial inequalities affect Black and Brown pregnant women and puerperae, exposing them to a



**Figure 2.** Risk factors\* of COVID-19 cases among pregnant women and puerperae hospitalized for Severe Acute Respiratory Syndrome, by race/skin color, January 2021 to February 2022, Brazil.

\* Principal risk factors: diabetes, obesity, chronic cardiovascular disease, and asthma.

Source: Authors.



**Figure 3.** Comparisons of SARS lethality (%) by race/skin color categories of COVID-19 cases among pregnant women and puerperae hospitalized for Severe Acute Respiratory Syndrome, Brazil, January 1, 2021, to February 21, 2022.

Source: Authors.

greater risk of a lethal outcome associated with COVID-19, emphasizing the puerperal period, in which Black women have higher percentages. Black and Brown women also accumulate the most risk factors for negative maternal outcomes during pregnancy and in the puerperium. Black and Brown pregnant women are the least admitted to the ICU.

As it is a recent phenomenon, few national studies analyze racial inequalities in maternal mortality from COVID-19<sup>19,20</sup>. At the international level, a study carried out in the United States points to results similar to ours, in which African-American women have a higher concentration of risk factors and a higher likelihood of maternal death from COVID-19 than white women<sup>21</sup>. Racism and its manifestations have been evidenced in studies on sexual and reproductive health and obstetric care. Black and Brown women have fewer prenatal care appointments, travel more during childbirth, have unsafe abortions, and undergo procedures without anesthesia<sup>2,3,9</sup>. They are exposed to dehumanized care, in which institutional racism, through implicit racial bias or explicit and perceived discrimination, occurs in care practices.

Black pregnant women and puerperae in this study had the highest prevalence of risk factors, such as cardiovascular disease, diabetes, and obesity, known for their deteriorating role in the clinical condition of patients diagnosed with COVID-19. The Black population knowingly accumulates more chronic diseases due to its substandard living conditions, dense housing, lack of sanitation, and neighborhoods with insufficient and inadequate public social equipment, a reflection of segregated regions<sup>22</sup>. The fringes of cities are segregated, and people live in care gaps. Black and Brown women must mainly move to large centers to access medium-and-high-technological density health services. The pandemic also highlighted the lack of ICU beds in regions that have accumulated territorial inequalities over time, and these places concentrate on Black and Indigenous people<sup>23</sup>.

Black women, particularly in the postpartum period, had more severe symptoms such as respiratory distress and O<sub>2</sub> saturation <95% and accumulated more risk factors. They had the highest lethality due to COVID-19, with a difference of 14.02% compared to the white ones. Obstetric racism influences the decision-making of health

**Table 2.** Results of the crude and adjusted logistic models of the association between race/skin color and death from SARS in cases of COVID-19 among pregnant women and puerperae hospitalized for Severe Acute Respiratory Syndrome, January 2021 to February 2022, Brazil.

Variables	Pregnant women				Puerperae			
	Crude Odds Ratio (95%CI)	P-value	Adjusted Odds Ratio (95%CI)	P-value	Crude Odds Ratio (95%CI)	P-value	Adjusted Odds Ratio (95%CI)	P-value
Race/Skin color								
White (ref.)	1		1		1		1	
Black	1.22 (0.91-1.64)	0.191	1.38 (0.97-1.98)	0.075	1.86 (1.28-2.71)	0.001	1.62 (1.01-2.63)	0.046
Brown	1.12 (0.98-1.29)	0.107	1.38 (1.16-1.63)	0.000	1.27 (0.93-1.37)	0.205	1.21 (0.95-1.54)	0.141
Age group <sup>1</sup>								
20-34 (ref.)	1		1		1		1	
10-19	0.79 (0.10-6.10)	0.819	0.47 (0.28-0.78)	0.004	0.78 (0.51-1.20)	0.258	0.71 (0.42-1.20)	0.201
35-49	1.53 (1.31-1.78)	0.000	1.36 (1.13-1.62)	0.001	1.12 (0.88-1.42)	0.363	1.07 (0.80-1.44)	0.640
>49	2.74 (1.89-3.98)	0.000	3.95 (2.52-6.18)		2.01 (1.50-2.71)	0.000	2.17 (1.44-3.25)	0.000
ICU admission								
No (ref.)	1		1		1		1	
Yes	8.50 (7.20-10.04)	0.000	8.08 (6.76-9.65)	0.000	7.78 (6.12-9.85)	0.000	8.00 (6.17-10.38)	0.000
Risk factors (total)	1.55 (1.44-1.68)	0.000	1.30 (1.19-1.43)	0.000	1.25 (1.16-1.35)	0.000	1.12 (1.01-1.23)	0.026

<sup>1</sup>The age group <10 years was removed from the analysis due to the small sample size (N=15 among pregnant women and N=2 among puerperae).

professionals, thereby hierarchizing people and dehumanizing Black and Brown women during prenatal care, childbirth, abortion, and the puerperium<sup>1,2,10</sup>. These situations are aggravated in extreme contexts such as the COVID-19 pandemic, and decisions about who should receive the best care are grounded on anti-Black racism and “let live, let die”<sup>4-6</sup> biopolitics.

The puerperae, especially Black women, have the most severe COVID-19 symptoms at hospitalization. The delay in seeking health services may be related to individual and community experiences preceding obstetric racism, which reserve this dehumanizing place for Black and Brown women. As a result, Black and Brown women arrive at the service in a more deteriorated clinical condition, with the need for ICU admissions, which is called a threshold situation<sup>9</sup>, as observed in our study. The declining income, particularly among women in the informal market, caused by the economic recession and aggravated by social distancing measures, and the fear of users to seek services for fear of contamination in public transport or health units are other factors that contributed to reducing the demand for services and put them at risk to their health in this pregnancy-puerperal period.

Although obstetric care has improved in Brazil, mainly regarding access to prenatal care, through expanded PHC coverage, with strategic programs such as Family Health, racial, regional, and socioeconomic inequalities persist, this is observed with the maternal mortality rates in the country<sup>24</sup>. The new coronavirus pandemic is in this situation, deepening the unequal gap in obstetric care and bringing new challenges to maternal health nationally. The first case of maternal death from COVID-19 was a young Black woman from inland Bahia state. She was helping her partner at work and became infected with the new coronavirus, a situation similar to the first case of death from COVID-19 in Brazil – a domestic worker<sup>25</sup>. This is the biopolitics of the body that is infected and infects and the body that dies in the “essential service” in poorly paid, exploited, and invisible work.

Universal health measures to contain the pandemic, such as social distancing, proper hand hygiene, the use of masks, and the possibility of remote work (home office), do not recognize the previous inequalities and racism that structure society. Black and Brown women are more informally incorporated into the labor market, with the lowest income, without the possibility of joining remote work or staying at home, and

consequently, more exposed to the possibility of infection by the SARS-CoV-2 virus, aspects that point to ineffective universal measures in this context.

No care protocols were developed as a main measure for pregnant women and mothers at the pandemic’s onset. On the contrary, prevention/mitigation initiatives were delayed, contributing to an increase in maternal death, and Brazil was the main country in maternal death from COVID-19 in the world<sup>26</sup>. Experts on the subject warned, at the beginning of the pandemic, considering that this group tends to be particularly vulnerable given the threats of infectious diseases, that global health has a previous history of how these diseases affect pregnant women and puerperae, as was the case with H1N1, in 2009, which increased maternal deaths, according to the World Health Organization. However, it is important to highlight that the maternal morbimortality setting is severe when infectious diseases find a terrain structured by inequalities, which is what has been seen with the new coronavirus pandemic. Measures for pregnant women should exceed telemedicine, which still reaches few because of technological barriers. Providing extensive diagnostic testing on a periodic basis, distributing surgical/N95 masks and alcohol gel in the units where prenatal care is performed, performing an active search for pregnant women and puerperae, and implementing broad vaccination coverage are examples of preventive measures that should be adopted in scale in this pandemic context.

Women and their rights are threatened in health, political, or economic emergencies. During the COVID-19 Pandemic, women’s sexual and reproductive health took backstage and was considered a non-essential service. In order to prioritize the control of the new coronavirus, there were interruptions in supply chains in general and the redirection of the production of supplies for COVID-19, and health professionals were relocated to care for victims of the virus. As a result, the offer of prenatal care appointments and care for puerperae, and the availability of contraceptive methods and continuous use medications used in the treatment of HIV and other communicable infections declined, directly affecting Black and Brown women who make up the group of people who use the public health system the most<sup>16</sup>. These measures can be called the “tyranny of the urgent”, a situation in which gender, race, and other social markers of oppression are not considered priorities for responses



to disease outbreaks, neglecting previously established unequal dynamics<sup>27</sup>.

Gender inequalities in care burden women, particularly Black, Brown, poor, and suburban women who are primarily responsible for care in the professional and domestic spheres. As a result, the pandemic was more intense for women with physical and mental illness, also impacting the unavailable access to sexual and reproductive health services, due to lack of time, given the double or triple shift of work (home, work, and children)<sup>16</sup>.

Many pregnant women and puerperae continued in their jobs even in a situation of risk due to the lack of a health policy and effective income transfer. Those who managed to leave due to pregnancy are under threat of returning to work on a mandatory basis even without completing the vaccination schedule<sup>28</sup>. Women are victims of a patriarchal, racist State that always puts guaranteed rights at risk, often claiming lives. Brazil was under the management of setbacks in constitutional and acquired human rights, a far-right federal government that acts to deepen racial, social, and gender inequalities<sup>16</sup>.

This study aims to fill in gaps on racism and its manifestations in maternal death from COVID-19 to contribute to overcoming racial inequalities in health through scientific evidence. However, it is important to mention some limitations, including the impossibility of analyzing education as a proxy for socioeconomic status,

given its incompleteness (more than 50% of missing values). The number of cases reported among Indigenous women and women of Asian descent was relatively small, and it was impossible to include them in the analysis models, despite recognizing the importance of studying the impacts of COVID-19 on maternal mortality in these population segments. Our findings do not consider the pandemic setting in 2020 due to the non-collection/public availability of the race/skin color item in this period.

Ultimately, racism and its manifestations (dis)organize the reproductive trajectories of Black and Brown women who, in their interaction with sexism, affect individual behaviors, interpersonal relationships, and care practices, contributing to negative outcomes for sexual and reproductive health. Black and Brown women cannot choose motherhood without oppression, hierarchies, and violence to see their offspring grow healthy and well, just as they cannot interrupt pregnancy with reproductive autonomy and safety. To this end, it requires a State that confronts racism and racial inequalities, where Black maternity are seen as legitimate in all their processes, from the decision for pregnancy to the seeking for assistance and care. Public policymakers and human rights defenders need to advance the sexual and reproductive health agenda from an intersectional perspective, striving for reproductive justice to overcome obstetric racism and everything it promotes.

## Collaborations

EF Góes, AJF Ferreira, and DO Ramos worked on the concept, design, data analysis and interpretation, drafting and critically reviewing the article, and approving the final version.

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