COVID-19 Hospitalization, Mortality, and Violence: Women's Circumstances in the Context of the Pandemic in Brazil

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ABSTRACT

This study outlines the rates of hospitalization, mortality, and violence for women in Brazil in the context of the COVID-19 pandemic, according to race/skin color/ethnicity. The study was developed with secondary data originating from official systems of information. The analysis of hospitalizations derives from data found in the Influenza Epidemiological Surveillance Information System (SIVEP-Gripe). The data on women's mortality due to COVID-19 and violence was obtained from Mortality Information System (SIM), with consideration for the International Classification of Disease codes (ICD-10). Averages, proportions, gross rates, adjusted rates, and rate ratios were calculated by the authors. Of the COVID-19-related hospitalizations, the majority of those registered occurred among women 50 or older, with an average age of 58.8 years. A higher number of hospitalizations was observed among white women, especially those with at least a primary and middle school education. COVID-19 deaths and violent deaths from undetermined causes (UD) were proportionately higher for women over 50 years old. Deaths by homicide were proportionately higher for girls and women 10 to 49 years old. The average age at the time of death was found to be approximately 69 years old by COVID-19, 34 by homicide, and 62 by UD. Deaths due to COVID-19 and UD were more prevalent among white women, whereas deaths by homicide were proportionately higher for Black women. Women with a basic education were more frequent victims of COVID-19, homicide, and UD. In terms of hospitalization and death by COVID-19 and UD, a higher adjusted rate was observed for Black women compared to white women. Indigenous women represented the highest adjusted rate in terms of homicide, followed by Black women. Despite white women experiencing proportionately higher hospitalizations and deaths from COVID-19 and UD, the adjusted rates reveal that Black women are most at risk of sickness and death from these causes.

Keywords: COVID-19, violence, homicide, gender, race, ethnicity

Introduction

The current health crisis brought by the COVID-19 pandemic has amplified social vulnerability (Campos, Tchalekian, and Paiva 2020). In Brazil, social inequality prior to the pandemic was described by the Brazilian Institute of Geography and Statistics (IBGE), which pointed out that the Black population makes up a significant portion of traditional communities, such as *quilombola* communities, riverside populations or *ribeirinhas*, and traditional fishing communities, as well as

those who live with food or land insecurity, live in extreme poverty, live on the street, are incarcerated, or inhabit informal living conditions or dwellings that do not meet adequate living standards. Apart from this, much of the Black population has difficulty accessing services and equipment related to heath, social services, and education (IBGE 2019a).

The COVID-19 pandemic has exacerbated the marginalization, stigmatization, and social exclusion of groups in vulnerable situations. In this context, inequalities related to gender, class, and race have intensified in the realm of geopolitics and the economy (Santos et al. 2021). These identities are shaped by specific forms of oppression and conditions of inequality manifested through colonial rule and reproduced systematically over time (Marques et al. 2021). Violence against women is the result of a structural system of domination-extraction fueled by racism, patriarchy, and capitalism. Therefore, violence can be understood as a product and condition of the relations of extraction-oppression (Barroso 2019, 142).

COVID-19 has severely impacted the health of the Black population in Brazil (Goes, Ramos, and Ferreira 2020). For instance, evidence shows that the rate of illness and mortality from COVID-19 for this population has been two to three times higher than that of the white population (Araújo et al. 2020). Therefore, tackling the effects of the pandemic requires acknowledging racism as a determining factor for health and confronting social inequality (Goes, Ramos, and Ferreira 2020).

The negligence of the federal government in managing the serious health crises prompted by COVID-19 has presented difficulties in planning joint measures with state and city authorities to control and mitigate the effects of the pandemic (Silva, Jardim, and Santos 2020). This mismanagement has weakened the health care system through the inability to properly articulate services, which has produced deficiencies with respect to expanding and publicizing support networks and decreased the possibility of providing the best care to the public (Cortes et al. 2020).

Research on gender and COVID-19 has revealed a significantly higher risk of death among men (Campos, Tchalekian, and Paiva 2020; Lakbar et al. 2020; Ahrenfeldt, Otavova, Christensen, and Lindahl-Jacobsen 2020). Despite the relevance of these findings, these studies neglected to consider ethnicity/race in their analyses. With respect to women, Reis et al. (2020) described that studies have not only found that they have experienced increased exposure to COVID-19, but also unplanned pregnancies, unsafe abortions, maternal mortality, sexually transmitted infections (STIs), and limited access to prevention and treatment for adverse outcomes related to sexual and reproductive health (Coutinho, Lima, Leocádio, and Bernardes 2020; Oliveira et al. 2022). Furthermore, the decline in social cohesion and social protection services has contributed to an upsurge in violence toward women (Reis et al. 2020).

Fórum Brasileiro de Segurança Pública (2020) has reported that during the initial months of the COVID-19 pandemic, there was an increase in data on violence against girls and women in various countries. In Brazil, in 2020, cases of femicide rose 22.2 percent from 2019. Between March and April 2020, reports of domestic violence increased by 37.6 percent, while official reports of rape decreased by 28.2 percent. However, this last figure can be correlated to the difficulties that victims have faced in reporting violence endured in the context of the pandemic (Fórum Brasileiro de Segurança Pública 2020). Taking effective control of the pandemic must include guaranteeing the rights of vulnerable groups (Reis et al. 2020).

In various countries, gender and race have been shown to contribute to cases of COVID-19 and violence (Tang et al. 2020). In July 2020, a mere sixteen countries invested in means of social protection aimed at women, that is, only a handful of governments produced and shared basic, separate data on gender, race/skin color/ethnicity, or morbidity-mortality, and the socioeconomic impact of health crises for these population groups. Governments should collect and analyze data, provide reports, and outline policies aimed at protecting certain groups, mainly those in situations of extreme vulnerability (Wenham et al. 2020).

In Brazil, the majority of female victims of violence are young, Black, and socioeconomically underprivileged (Curia, Gonçalves, and Zamora 2021). Data released by the Atlas on Violence (*Atlas da Violência*) for the year 2019 revealed that 66.0 percent of murdered Brazilian women were Black (Cerqueira et al. 2021, 38). The rate of homicides had fallen by 17.3 percent compared to 2018. However, this decrease occurred mainly among non-Black women (24.5 percent), whereas for Black women the decrease was 15.7 percent. The rate of homicide among Black women (4.1) was much higher than the rate for non-Black women (2.5), meaning that the relative risk of a Black woman being a victim of homicide is 1.7 times the risk for a non-Black woman (Cerqueira et al. 2021, 36–38).

An analysis of violence and mortality in relation to women requires an intersectional and intersectoral approach. To look at exactly how different groups are disproportionately affected and respond to the impacts of COVID-19, an intersectional analysis is key as it allows for a wider understanding of the determining factors and social consequences of this phenomenon (Maestripieri 2021). In these terms, COVID-19 constitutes a social disease (Trout and Kleinman 2020), in that it is a classic example of a phenomenon that results in the structural intertwining of multiple inequalities. This panorama of social inequality requires developing methodical research aimed at understanding the reach of public policies in health services and their outcomes, analyzing elements of community protection, and assessing the impacts of racism and other determining factors of morbidity-mortality in the context of the pandemic (Hooper, Nápoles, and Pérez-Stable 2020).

Few studies have developed approaches that consider social identities along within equality related to gender, class, and race/skin color/ethnicity (D'Oliveira et al. 2020). These identities are fundamental for understanding the phenomenon of gender violence (Curia, Gonçalves, and Zamora 2021), and its particular impact on Black women (Gonzaga and Cunha 2020). To understand the impact of both COVID-19 and violence during the pandemic for women in Brazil, this study analyzes reports of hospitalization, mortality, and violence against women in the context of COVID-19, specifically with respect to race/skin color/ethnicity.

Research Material and Methods

This study is interdisciplinary and of an exploratory nature and was developed with secondary data originating from official systems of information on health in Brazil. Reports of hospitalization, mortality, and violence against women in Brazil in the context of COVID-19, specifically with respect to race/skin color/ethnicity, are analyzed to determine their impacts on women.

In order to analyze reports of hospitalizations, the authors used the Influenza Epidemiological Surveillance Information System (SIVEP-Gripe) to acquire data referencing hospital admissions for Severe Acute Respiratory Syndrome from COVID-19, for the period between January 2020 and September 2021. Data on female mortality due to COVID-19 and violence during the pandemic was acquired from the Mortality Information System, dated from January 2020 to May 2021. Population data was obtained from IBGE (2019b). The authors attributed International Classification of Diseases codes (ICD-10) to identify the following: B34.2—Coronavirus infection, unspecified site (deaths due to COVID-19); ICD X85 to Y09, Y35 (violent deaths by homicide); and ICD-Y10 to Y34 (deaths due to an event of undetermined intent, referred to in this study as UDs¹). Codes were used in accordance with the recommendation from the World Health Organization (2020). It is also important to note that homicide pertains to all deaths for which the violent cause that led to each

¹ Called *mortes violentas por causas indeterminadas* (MVCI).

death has been defined, while UD is used for deaths where the cause and/or motivation is undetermined. Nevertheless, the UDs were included in this study as they constitute a group of causes that possibly contain undisclosed homicides (Cerqueira 2013).

The data was analyzed with consideration for varied socio-demographics such as race/skin color/ethnicity, age group, education level, and region. In relation to the variable race/skin color/ethnicity, the authors considered the following categories in accordance with the IBGE (2019b) classification: white (*branca*), Black (*preta*), brown (*parda*²), *amarela*,³ and Indigenous (*indígena*). It is worth noting that the categories *preta* and *parda* were analyzed together, resulting in the sole category Black.

Proportions, gross rates (data not shown), adjusted rates, and rate ratios for COVID-19 and violence were calculated by the authors. Adjustments were made through direct method, according to race/skin color/ethnicity and age group on the basis of 100,000 residents. Taking into account the varied effects of a health crisis caused by a pandemic, with complications and outcomes, the adjustment of rates allows for estimations regarding heterogeneous population groups, permitting in turn a representative examination of the apparent and exacerbated inequalities in the context of the pandemic (Nisida and Cavalcante 2020).

To calculate the rate ratio, the authors used white women as a reference, bearing in mind that this segment of the population is less exposed to assault, illness, and death. The data was organized in *calc* spreadsheets and assessed through R programming language (version 4.0.2), with the package called "descr" (Aquino, Schwartz, Jain, and Kraft 2018).

Results

From January 2020 to September 15, 2021, the SIVEP-Gripe registered 2,369,303 cases of hospitalization for Acute Respiratory Syndrome, 1,704,308 (71.9 percent) of which were reportedly a result of COVID-19. Of this total, 751,590 cases (44.1 percent) occurred in women. It should be noted that in 244 cases (0.014 percent) the sex of the victim was not registered.

The median age of women hospitalized with COVID-19 was 58.8. Of these hospitalization cases among women, 70.2 percent of the women were older than 50, 42.9 percent were white, and 19.3 percent had low education levels. It is worth pointing out the elevated percentages of underreporting of race/skin color/ethnicity (18.3 percent) and education level (64.3 percent) (see Table 1).

² The literal translation for *pardo/parda* would be brown. It is used by people with a range of skin colors between black and white to signify, typically, a multi-ethnic or multi-racial identity. Due to its specific use and nuanced meaning in Brazil, the translator for this article has chosen to leave this word in the original Portuguese.

³ The literal translation for *amarela* is yellow and refers to people of Asian ancestry. Due to the offensive nature of the word in English, the translator has chosen to leave this word in the original Portuguese.

Table 1

0.1		0/
		%
0 to 09	8,719	1.2
10 to 19	6,331	0.8
20 to 29	31,496	4.2
30 to 39	72,279	9.6
40 to 49	105,636	14.1
50 to 59	147,177	19.6
60 to 69	153,200	20.4
70 or more	226,752	30.2
Unknown*	0	0.0
White	322,516	42.9
Black [Preta]	32,098	4.3
Parda	250,664	33.4
Black [Negra*]	282,762	37.6
Amarela	7,060	0.9
Indigenous	1,458	02
Unknown*	137,794	18.3
No schooling	19,391	2.6
Primary school	74,971	10.0
Middle school	50,194	6.7
High school	82,765	11.0
Higher education	36,798	4.9
Not applicable	3,915	0.5
Unknown*	483,556	64.3
	20 to 29 30 to 39 40 to 49 50 to 59 60 to 69 70 or more 70 or more Unknown* White Black [<i>Preta</i>] <i>Parda</i> Black [<i>Preta</i>] <i>Parda</i> Black [<i>Negra*</i>] <i>Amarela</i> Indigenous Unknown* No schooling Primary school Primary school High school Higher education	0 to 09 8,719 10 to 19 6,331 20 to 29 31,496 30 to 39 72,279 40 to 49 105,636 50 to 59 147,177 60 to 69 153,200 70 or more 226,752 Unknown* 0 White 322,516 Black [<i>Preta</i>] 32,098 <i>Parda</i> 250,664 Black [<i>Negra*</i>] 282,762 <i>Amarela</i> 7,060 Indigenous 1,458 Unknown* 137,794 No schooling 19,391 Primary school 50,194 High school 82,765 Higher education 36,798 Not applicable 3,915

Source: SIVEP-Gripe—Information Technology Department of the Unified Health System (SUS). *Unregistered data

In relation to accounts of death from COVID-19 registered by SIVEP-Gripe, for the period between January 2020 and May 2021, 433,032 deaths were reported, 190,509 of which were women (43.9 percent). During that same period, 184,274 deaths were reportedly due to external causes. Of these, 57,406 (65.1 percent) were declared to be death by homicide and 30,809 (34.9 percent) were UDs, culminating in 88,215 deaths caused by violence. Out of all deaths registered with these causes, 11,231 (12.7 percent) of the individuals were women: 4,577 deaths (40.8 percent) by homicide and 6,654 deaths (59.2 percent) by UD.

Upon analyzing the deaths to determine age group, a higher proportion of deaths by COVID-19 and UD was observed among women 50 years and older, corresponding to 88.7 percent and 67.7 percent, respectively. In terms of registered deaths by homicide, a higher proportion was observed in girls and women from 10 to 48 years of age (81.1 percent), while 29.0 percent of deaths in this age group were by UD. The average ages of death equated to, approximately, 69 years old by COVID-19, 34 years old by homicide, and 62 years old by UD.

Upon analyzing the deaths of women according to their race/skin color/ethnicity, it was found that a predominance of deaths by COVID-19 (53.6 percent) and UD (50.3 percent) occurred for white women, while Black women experienced a predominance of mortality by homicide (67.5 percent) (see Table 2).

V · · · ·	Category	COVID-19		Homi	icide	UD	
Variable		n	%	n	%	Ν	%
Age Group	0 to 09	384	0.2	113	2.5	174	2.6
	10 to 19	393	0.2	608	13.3	261	3.9
	20 to 29	1886	1.0	1,303	28.5	524	7.9
	30 to 39	5,802	3.0	1,113	24.3	547	8.2
	40 to 49	12,958	6.8	689	15.1	600	9.0
	50 to 59	24,829	13.0	366	8.0	583	8.8
	60 to 69	44,096	23.1	185	4.0	738	11.1
	70 or more	100,158	52.6	165	3.6	3,182	47.8
	Declined to state	3	0.0	35	0.8	45	0.7
Race/Skin Color/Ethnicity	White	102,201	53.6	1,347	29.4	3,346	50.3
	Black [Preta]	15,497	8.1	301	6.6	473	7.1
	Parda	65,656	34.5	2,789	60.9	2,647	39.8
	Black* [Negra]	81,153	42.6	3,090	67.5	3,120	46.9
	Amarela	1,121	0.6	10	0.2	52	0.8
	Indigenous	573	0.3	51	1.1	19	0.3
	Declined to state	5,461	2.9	79	1.7	117	1.8
Education Level	No schooling	25,191	13.2	168	3.7	797	12.0
	Primary school	56,415	29.6	797	17.4	1,714	25.8
	Middle school	27,308	14.3	1,463	32.0	1,266	19.0
	High school	32,001	16.8	912	19.9	1,243	18.7
	Some higher education	1,985	1.0	73	1.6	93	1.4
	Completed higher education	13,782	7.2	150	3.3	460	6.9
	Declined to state	33,827	17.8	1,014	22.2	1,081	16.2

Table 2

Characterization of Mortality Due to COVID-19 and Violence Against Women in Brazil, 2020–2	Characterization of Mortalit	ty Due to COVID-19 and Violence	e Against Women in Brazil. 2020–21
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Source: Information System on Mortality—Information Technology Department of the Unified Health System (SUS).

Note: *the percentages in reference to the category Black (9gain) correspond to the sum of Black (preta) and parda.

In examining Brazil's five regions, we observed that Black women died in higher proportion by homicide in the North (82.2 percent) than in the Northeast (86.8 percent), the Southeast (54.2 percent), and the Central-West (66.2 percent) regions. A higher proportion of mortality by UD for white women was observed in the Southeast region (57.9 percent), while in the South, there was a

higher proportion of death by both homicide (74.3 percent) and UD (86.8 percent) among white women.

In the distribution of deaths according to education level, a higher proportion of female deaths by COVID-19 (74.0 percent), homicide (73.0 percent), and UD (75.4 percent) was observed among those with no schooling or with an education level between primary school and high school. This pattern repeated in the distribution by region in Brazil.

The adjusted rates and rate ratio of hospitalization and mortality of women due to COVID-19 and according to race/skin color/ethnicity revealed that Black women experienced the highest rates of hospitalization (800.1) and mortality (166.4). These results correspond to a 10.0 percent increase in the hospitalization and mortality of Black women in relation to white women (see Table 3).

Table 3

Adjusted Rates and Rate Ratios of Female Hospitalization and Mortality Due to COVID-19 by Race/Skin Color/Ethnicity in Brazil, 2020–21

Race/Skin Color/Ethnicity	Hospital	ization	Mortality		
	Adjusted Rates	Rate Ratios	Adjusted Rates	Rate Ratios	
White	727.2	1.0	151.0	1.0	
Black [Preta]	558.0	0.8	175.1	1.2	
Parda	851.4	1.2	164.6	1.1	
Black [Negra]	800.1	1.1	166.4	1.1	
Amarela	687.7	1.0	71.7	0.5	
Indigenous	534.5	0.7	151.9	1.0	

Source: SIVEP-Gripe; SIM-Information Technology Department of the Unified Health System (SUS); IBGE (2019b).

The adjusted rates of death by homicide were higher for Indigenous women (11.65) and Black women (5.72). This result represented a rate ratio of 4.62 and 2.27, respectively, that is, Indigenous and Black women died by homicide at an increase of 362.0 percent and 127.0 percent, respectively, as compared to white women. In terms of UD, we found higher adjusted rates for Black women (6.19), representing a rate ratio of 1.23, that is, mortality among Black women was 23.0 percent higher when compared to white women (see Table 4).

Table 4

Race/Skin Color/Ethnicity	Homi	cide	UD		
	Adjusted Rates	Rate Ratios	Adjusted Rates	Rate Ratios	
White	2.5	1.0	5.0	1.0	
Black [<i>Preta</i>]	3.7	1.5	5.6	1.1	
Parda	6.1	2.4	6.3	1.3	
Black [Negra]	5.7	2.3	6.2	1.2	
Amarela	0.7	0.3	3.3	0.7	
Indigenous	11.7	4.6	4.9	1.0	

Adjusted Rates and Rate Ratios of Female Mortality Due to Homicide and Violent Death Due to Undetermined Intent (UD) by Race/Skin Color/Ethnicity in Brazil, from January 2020 to May 2021

Source: Information System on Mortality-SUS Information Technology Department.

It is worth pointing out the proportionately high underreporting of the variables for race/color/ethnicity with respect to hospitalization by COVID-19 (18.3 percent) and education level (64.3 percent). In terms of mortality, there was also proportionately higher underreporting of the variable for education level, namely, mortality by COVID-19 (17.8 percent), homicide (22.2 percent), and UD (16.2 percent).

Analysis

The profile of hospitalization, death due to COVID-19, and violence against women reflects social inequity and regional inequality. In this study, we found that white women saw a higher proportion of death by COVID-19 and UD, whereas Black women saw a higher proportion of death by homicide. The adjusted rates for hospitalization and mortality by COVID-19 and UD were higher for Black women in comparison to white women. Indigenous women represented the highest adjusted rate for homicide, followed by Black women. We found a higher proportion of registered deaths by COVID-19 and UD among women 50 years and older. Women in the reproductive age range (10 to 49 years old) showed a higher proportion of death by assault.

Homicides against women of a fertile age are the result of relations of domination and extreme gender inequality, and these are expressed through violations of sexual autonomy, and physical, psychological, financial, and reproductive harm, often with a fatal result (Nóbrega et al. 2019). The World Health Organization (2013) estimates that 38 percent of female murders are committed by loved ones or partners, a type of murder called femicide (*feminicidios*). Homicides against women demonstrate the need for interdisciplinary and intersectoral attention (Carnevalle et al. 2019). Moreover, intervention measures aimed at preventing the death of women during their reproductive years will impact future generations (Madeiro et al. 2018).

In relation to the high proportion of UD in the 50 and older age group, it is worth noting that violence affects women outside the reproductive age range in a different manner (Pereira and Tavares 2018). Violence associated with aging can be related to a loss of productivity, lack of social importance and acceptance, negligence, and abandonment, in addition to generational conflicts and circumstances that make adult and elderly women especially vulnerable to acts of persistent violence at home, carried out not only by romantic partners, but also by children and grandchildren (Pereira and Tavares 2018).

That being said, the elevated average age among hospitalized women could signify one of the characteristics of illness provoked by the new coronavirus in that it affects adult and elderly populations with higher severity and death, mainly those with comorbidities. The elevated average for female deaths by UD, especially among elderly women, may reflect deaths stemming from abuse and violent acts committed against them by their own family members or persons with whom they were close, often considered part of normal behavior (Caldas et al. 2008). All these issues could result in inaccurate reporting of the causes of death among this group.

Low education level corresponded to the proportionately higher numbers of female deaths by homicide and UD. The literature revealed that Black women with a lower education level represent the main victims of every type of violence (Barufaldi et al. 2017). A higher level of schooling facilitates better employment positions and financial resources, access to information and channels for reporting violence committed against them, and, possibly, a decreased likelihood of ending up in situations of abuse that result in death (Bernardino et al. 2016). In this sense, actions that promote equality of access to education and guaranteed employment opportunities, above all, for Black women, are fundamental to putting an end to the cycles of violence to which women are subjected.

The proportionately higher deaths of white women in relation to Black women by homicide and by UD in the Southern region in Brazil can be explained by the quantitatively higher population of white women in this area (74.7 percent) (IBGE 2019b). Recently published data has demonstrated that, in 2019, the three states that make up this region showed large proportions of death by homicide among white women (Cerqueira et al. 2021).

Morbidity-mortality due to COVID-19 in Brazil reflects the many social inequalities in health care (Abrams and Szefler 2020), out of which structural racism is the largest determining factor. Structural racism causes resources to be distributed unequally and weakens population groups that have been historically discriminated against, through a process that leaves them more susceptible to COVID-19, other illnesses, and harm. At the same time, these population groups have less access to medical treatment and less possibilities for prevention and continuous treatment, along with experiencing violations of other basic rights. In this sense, the situation brought by the pandemic has formed into a eugenicist tool, in which socioracial inequalities are amplified and severely affect the Black population, and, even more markedly, the lives of Black women (Gonzaga and Cunha 2020). The overall context of the pandemic has exposed vulnerabilities, intensified existing inequalities, and, by virtue of the effects produced, paved the way for these social differences to have lasting effects in the long term (Haase 2020).

Literature indicates that there is significant underreporting of homicides listing homicide as the root cause of death. A study produced by the Atlas on Violence in 2013 estimated that 73.9 percent of violent deaths of undetermined cause were undisclosed homicides (Cerqueira et al. 2021, 20). On account of this, in the research on mortality by violent causes by García et al. (2015, 252), it is indicated (recommended) that one should consider the "Events (incidents) in which the intention cannot be determined" ("Eventos [fatos] cujaintenção é indeterminada"), in addition to other causes the authors describe in their book.

In Brazil, the rise in the percentage of violent deaths by undetermined cause has already been pointed out (Cerqueira 2013). With the advent of the pandemic, it appears that this problem has worsened. Moreover, despite the inability to determine the exact cause of death, it is well known that these constitute violent deaths.

In many countries, women suffer as victims of gender inequality, discriminatory laws, and unfavorable socioeconomic situations. Death represents not only the greatest but also an avoidable expression of this violence. In a study carried out between 2000 and 2017 on female mortality by homicide and its contributing factors, a growth trend was observed in certain regions in Brazil, mainly among young Black women (Aragão, Mascarenhas, Rodrigues, and Andrade 2020). This data, the researchers propose, shows the need for specific and more adequate public policies for the different regions, and for the implementation of protection laws for women and affirmative actions designed to combat gender inequality in all dimensions of public life. These actions should originate from the Brazilian state, especially in the context of the pandemic.

Among the limitations of this study, what stands out is the underreporting, inaccurate completion of paperwork, and inadequate data, and therefore the misinformation that exists. In addition, only two health information systems were used. Moreover, this study does not establish a causal relation between COVID-19 and violence toward women.

Final Considerations

This analysis of female hospitalization and mortality due to COVID-19 and violence in the context of the pandemic in Brazil, and according to race/skin color/ethnicity, has demonstrated that white women experience proportionately higher hospitalizations and mortality by COVID-19 and UD. However, the adjusted rates of hospitalization and mortality reveal that Black women are more vulnerable to the risk of illness and death from these same causes. Thus, it is clear that the pandemic has affected white women in a different manner than it has Black women. This disparity stems from the historical legacy of racism, discrimination, and socioeconomic disadvantages experienced, above all, by Black women.

The findings of this study point to the need for specific interventions. From a policy standpoint, we would recommend implementing actions for the social protection of women, especially actions directed at those most vulnerable, strengthening integration health care networks, recognizing women's rights, and reducing key determinants of violence and death. Technically speaking, we would urge that the detection and reporting of cases be improved with daily updates and more transparency, which includes certifying the process of data collection and health information systems. There is a need to develop research that assesses patterns, tendencies, and magnitudes, and that establishes a relationship between hospitalization and mortality due to COVID-19 and violence toward women, taking into consideration the dimension of ethnicity and race.

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