

Gender and Race on the Frontline: Experiences of Health Workers in Brazil during the COVID-19 Pandemic

Clare Wenham ,¹ Michelle Fernandez ,^{2*}
Marcela Garcia Corrêa,³ Gabriela Lotta,³
Brunah Schall,⁴ Mariela Campos Rocha,⁴ and
Denise Nacif Pimenta⁴

Studies on the differential effects of health emergencies have largely overlooked women health workers. Whilst the literature has shown the impact of Coronavirus disease-19 (COVID-19) on women and on healthcare workers, little research has considered the gendered effects of the health workforce. This article analyses the impact of COVID-19 on healthcare workers and working conditions in Brazil's public healthcare system, through consideration of gendered and racialized understandings of care and work. Data were taken from an online survey of 1,263 health workers, undertaken between September and October 2020, disaggregated by sex and by race in order to understand health workers' experiences of the pandemic in one of the countries most significantly affected by the crisis.

Introduction

Health emergencies differentially affect groups across societies (Ginette Azcona et al. 2020). As witnessed during H1N1, Ebola, and Zika outbreaks, and now experienced by the global population during the Coronavirus disease-19 (COVID-19) pandemic, socioeconomic factors, race, geographical location, and gender all create different pathways of vulnerability to infection, and similarly create differential secondary impacts from the interventions introduced to mitigate the virus's spread (Harman 2016; Smith 2019; Wenham 2021).

¹Department of Health Policy, LSE, London, UK; ²Political Science Institute, University of Brasilia, Brasilia, Brazil; ³Fundação Getulio Vargas (FGV-EAESP), São Paulo, Brazil; ⁴René Rachou Institute—Fiocruz Minas, Belo Horizonte, Brazil

*michelle.vfernandez@gmail.com

One key group which has been disproportionately infected and affected are healthcare workers. Physicians, nursing staff, community healthcare workers (CHWs), and beyond have all been on the frontline of responding to the COVID-19 crisis ([Adams and Walls 2020](#)). In doing so, this has disproportionately exposed them to increased risk of infection with COVID-19, particularly in locations where there has been no access to adequate personal protective equipment (PPE) or necessary training in how to safely use it ([Zhang et al. 2020](#)). This reality has been reflected in the number of confirmed cases and deaths amongst healthcare workers ([Lapolla, Mingoli, and Regen 2020](#)): estimated to be over 7,000 reported cases by September 2020 ([Amnesty International 2020](#)), but as the world continues into the second, third, or fourth wave of COVID-19, this number is certainly much higher.

Not only have healthcare workers been disproportionately exposed to infection by COVID-19, but they have also borne the brunt of the additional labor associated with caring for patients during the pandemic ([Liu et al. 2020](#)). This includes poor working conditions, having to wear PPE all day, with many comparing such practice as working in a sauna and with physical scarring on their faces ([Loibner et al. 2019](#)). This has been compounded by the additional working hours created by the pandemic and increasing caseloads for healthcare workers. For many healthcare workers this included working in infectious disease control and intensive care units for the first time. Furthermore, many healthcare workers have changed their own domestic arrangements to be able to perform their professional role, with some choosing to move out of their houses to protect their family members or having to rearrange childcare provision to enable them to work when schools and childcare locations were forced to close ([Billings et al. 2020](#)). Simultaneously, there have been increasing reports of violence against healthcare workers during COVID-19 pandemic ([Devi 2020](#)). As a result of these challenges, globally we have seen a significant increase in healthcare worker burnout, mental health concerns, and stress, as they are on the frontlines of responding to the crisis ([Feinstein et al. 2020](#); [Matsuo et al. 2020](#); [Shanafelt, Ripp, and Trockel 2020](#)).

This has to be considered in the context of gendered and racialized historical legacies on Brazilian health system. Recent neoliberal reforms in Brazil, particularly from 2016 onwards, withdrew investments in the national health system (Sistema Único de Saúde [SUS]), weakened national policy coordination, and diminished the level of “universal” coverage in primary healthcare ([Magalhães 2016](#); [Morosini, Fonseca, and Lima 2018](#)). This happened after the impeachment of former president Dilma Rousseff, a left-wing politician, and led to a major political context of political disputes and budget constraints concerning public policies ([Vieira et al. 2018](#)).

In this context, gender and racial inequalities are produced and reproduced within the SUS both among those who deliver healthcare and those who receive it. Firstly, the nursing profession is undervalued publicly whilst being heavily feminized and racialized, employing predominantly women and

particularly black women in nursing roles that require less formal education. From the late nineteenth century onwards, nursing was practiced without standard professional training. Although these pre-professional nurses were considered essential to medical activity, they received no payment or social recognition; it was charitable work or enslaved work done by women. Such rises entwined labor with “love” and “care for the other” (Lombardi and Campos 2018). As more socially mobile women started to be involved in nursing, social recognition began to shift and a professionalization process began. Nowadays white women with college education are predominant among nurses in managerial positions while black women nurses tend to be undereducated and underpaid (Lombardi and Campos 2018). These origins still influence contemporary public perceptions of nursing, considered to be inferior “women’s work,” associated with low qualifications, charity, and a gateway to the labor market for underprivileged women, poor, and black people (Lombardi and Campos 2018). Secondly, the first CHWs hired in Brazil to target reproductive health and childcare (Vieira-Meyer 2015) were all women, who had never been in paid employment previously. Contemporary employment data show the majority of CHWs in Brazil are black women, living in the communities they attend (Milanezi et al. 2020; Nunes 2020). Given this blended reality between home and work, it is common for CHWs to work extra hours without compensation, considering their work as family-style duties, a notion which is in turn exploited by the state (Barbosa et al. 2012).

Amongst users, black and indigenous people’s health has been historically neglected and they have experienced poorer health outcomes than their white counterparts, despite the rhetoric of the right to health enshrined in the SUS. Such institutional racism has emerged in diverse ways: the invisibility of diseases that are prevalent among these populations; lack of racial awareness in professional training; structural barriers to access health services and medication; and poor-quality health assistance (Kalckmann et al. 2007). This intersection between gender, race, and quality of care is never so apparent as during pregnancy and childbirth, going from worst to best care provided to black, brown, and white-skinned women (Leal et al. 2017).

These inequalities have been exacerbated during the pandemic, as it was observed that brown (*pardo*) and black Brazilians have a significantly higher risk of mortality than white Brazilians (Baqui et al. 2020). This difference was also observed geographically: the population in Brazil’s north region (with a racial demographic which is 23 percent white and 67 percent *pardo*) had a higher burden of severe COVID-19 than in the central-south region (78 percent white and 17 percent *pardo*), with the exception of Rio de Janeiro (Baqui et al. 2020). Among pregnant women, black women’s COVID-19 mortality has been almost twice as high as that of white women, due to social rather than biological determinants of health (Santos et al. 2020).

In this context, a second social group which has been increasingly documented as disproportionately affected by the pandemic is women (Wenham

et al. 2020). Women worldwide have absorbed the additional domestic load as a result of government policies introduced to manage the pandemic. They have done so either alongside paid employment, juggling both demands with long days and nights, have taken unpaid leave or have left their jobs to take on this role, mimicking well-understood considerations of the circle of care (Antonopoulos 2009). Even in dual-parent households, it has disproportionately been the woman who has performed this task, whether due to sociocultural gender norms associated with parenthood, or whether due to the gender pay gap (Wenham 2021). Moreover, many industries which have been disproportionately affected by lockdown measures are heavily feminized. This includes hospitality, tourism, recreation, education, and social care. One of the consequences of the economic crisis was that many women (and more women than men) have lost their jobs as a consequence of the pandemic (Covid Inequality Project 2020).

The combination of these macro and micro factors means that women in general—and non-white woman from the lowest socioeconomic groups in particular—have been significantly impacted by COVID-19 and its downstream effects (Kopel et al. 2020). Beyond financial security, women are experiencing greater anxiety than men as a consequence of COVID-19 (Lebel et al. 2020), as well as suffering at the hands of abusers, with skyrocketing rates of gender-based violence associated with stay-at-home orders (Peterman 2020).

Moreover, access to healthcare, and in particular sexual and reproductive health services, has been compromised for many women, owing to both supply and demand changes, with disruptions of global supply chains meaning women have not been able to find their preferred methods of contraception; with women fearing disease transmission, or not wanting to burden the swelling health system with reproductive health needs; or simply the distortion of all healthcare services to service COVID-19 demand, with outpatient care, such as maternity services, the first to fall prey to this surge in capacity need (Institute 2020; Jardine et al. 2020; World Health Organization 2020b).

Therefore, it appears that significant analysis has shown the impact of COVID-19 on women and on healthcare workers, but little research thus far has considered the gendered effects on the healthcare workforce during the pandemic (Estrela et al. 2020). Globally, 70 percent of healthcare workers are women, and this percentage rises to 90 percent when including social care workers (Jardine et al. 2020). Moreover, although women represent the majority of health and social workers, only 25 percent of leadership positions are occupied by them (World Health Organization 2019). In this sense, healthcare policy is delivered by women but led by men. Thus, any gendered analysis of COVID-19 must pay close attention to the direct and indirect impact of the pandemic on healthcare workers, as a key constituent group of women on the frontline. As can be seen, it is not only women's unpaid care, which is taken advantage of during health emergencies, but women's paid (or underpaid)

labor is similarly the backbone of the response launched at all levels of governance to combat the virus (Kopel et al. 2020). Furthermore, there has been little consideration of the racialized impact of COVID-19 within the healthcare workforce (Milanezi et al. 2020), despite the fact that frontline healthcare workers globally are disproportionately black, Latina, and other minority ethnic groups. Whilst race has become an increasingly dominant narrative within COVID-19, this seems restricted to risk factors associated with poorer health outcomes (Bhala et al. 2020).

In this article, we seek to contribute to this literature to demonstrate the gendered and racial effects of COVID-19 within the role of women as healthcare workers. Through an online survey, we sought to understand experiences of the coronavirus pandemic in one of the countries most significantly affected by the crisis. In disaggregating these data, both by gender, and by race, we were able to understand the differential experiences of healthcare workers during this period, to offer greater analysis of the gendered determinants, perceptions, and experiences of the frontline workforce in an emergency scenario.

Context and Methods

Context

At the end of March 2021, Brazil was one of the epicenters of the global pandemic, with more than 300,000 confirmed deaths and almost 12 million cases (Ministry of Health 2020). This is despite the fact that Brazil has a public, decentralized, and universal health system. Services are divided in three levels of care (Primary, Specialized, and Tertiary) which are in turn provided by federal, state, and municipal governments.

Health and public policy experts have signaled the failures of the Brazilian system in the response to pandemic, highlighting the uncoordinated federal, state, and municipal responses and lack of political leadership by President Jair Bolsonaro (Castro 2020; Ferigato et al. 2020). Denial of the pandemic, lack of planning, and investment in health are the hallmarks of the Brazilian Federal Government's actions during COVID-19, which accentuated historical inequalities (Caponi 2020). One of the main consequences of the failed government response has been the increased risk of disease exposure among marginalized groups—low-income groups, residents of urban peripheries, mostly black and who depend on the SUS to access health.

As in other countries, women have disproportionately suffered the secondary consequences of the pandemic, and there remains no gender consideration in pandemic response policies. In fact, Bolsonaro and his government openly stand against gender-related discourse. In his inaugural address, Bolsonaro defined the fight against “gender ideology” as one of his mandate's priorities (Guirado 2019). On the other hand, Bolsonaro reinforces toxic masculinity;

encouraging men to adhere less to public health prevention measures, through statements such as “face the virus as men and not as brats” (Ferraz 2020) and performatively by not to adhering himself to prevention measures such as social distancing or wearing a mask (Dembroff 2020).

According to Blofield, Ewig, and Piscopo (2017) during the “pink tide” in Latin America (the wave of social democratic governments at the turn of the millennium), the region witnessed overall gender equality gains, due in part to the ideology of left politicians, and further catalyzed by feminist activism that pressured governments to react. This has been reinvigorated by growing anti-feminist sentiment within Brazilian society. Whilst we cannot discredit the importance of the transnational conservative moment entrenching anti women’s rights rhetoric and policy (Ramírez 2020), President Bolsonaro constantly stereotypes his understanding of women’s movements and in doing so tries to discredit their agenda (Aguilar and Perreira 2019). In this way, the “ideology of gender” is used as a strategy by the anti-feminist movement to create tension (Paternotte and Kuhar 2017).

Alarming this anti-feminist movement seems to be growing in Brazil: for example, an online community called “A Voice for Men” experienced a recent increase of traffic (Rothermel 2020). Such online forums are widely used to spread polarizing and hateful messages and to organize attacks on feminist activists. This has been an acute risk for those who have publicly defended the decriminalization of abortion, who have been targeted by conservative groups, forcing one activist to leave the country to protect themselves from death threats (Rossi 2019). Concurrent with global trends, Brazil has highly feminized health and social care sectors, and intersectional traits determine the informal and unemployed sectors: with black women disproportionately unemployed (Gênero e Número 2020), working in precarious jobs, or living below the poverty line (Observatório das Desigualdades 2020).

In 2020, femicide increased by 22 percent, and calls to domestic violence helplines increased by 27 percent (Bastos, Carbonari, and Tavares 2020). Violence has also increased amongst healthcare workers as they are perceived as vectors of COVID-19. Studies report that healthcare workers often experience stigma such as the denial of services, housing, verbal abuse or gossip, and social devaluation. Moreover, their family members face “secondary” or “associative” stigma (Devi 2020; Dye et al. 2020).

According to the 2000 census, women comprise almost 70 percent of healthcare professionals in Brazil; this ranges from 46.6 percent for higher-grade jobs such as physicians to 74 percent of medium and elementary level roles (such as CHWs and technicians), and 80 percent of nursing staff (Cofen 2020a; Scheffer et al. 2020). Thus, during the pandemic women have been constantly exposed to contagion (Carli 2020; World Health Organization 2020a; World Health Organization 2020b). This being so, women have accounted for 58.2 percent of cases of health professionals being hospitalized,

between October 11 and 17, 2020, and 55.4 percent of deaths ([Ministry of Health 2020](#)).

Hierarchy within the Brazilian health system tends to be more racialized than gendered. White nurses with university degrees occupy most of the administrative and managerial positions within health centers, having authority over teams of predominantly black nursing professionals with school-level education ([Lombardi and Campos 2018](#)). Statistics from 2015 showed that nurses are 61.6 percent white women and 58.4 percent white men, while among nurse technicians these numbers are smaller, 52.4 percent of white women and 51.8 percent of white men, and therefore there are more black nurse technicians than nurses ([RAIS 2015](#)). There are no comprehensive statistics on the race of CHWs; however, studies in several regions showed that the majority of CHW self-report as black or *pardo* (Milazeni et al. 2020).

Adopting a gender perspective on health workforce working conditions is necessary to understand the impact of COVID-19 on the health system, but also to (re-)address historical and structural inequalities across Brazilian society. The feminization of the health sector reflects broader understandings of the gendered division of labor, separation of the public and private spheres, and the burden women absorb in care work ([Hirata 2016](#)). Moreover, an intersectional perspective that considers class, race, and gender inequalities as interdependent, dynamic, and coexisting reveals possible omissions of the distinct experiences that white and black women have ([Kergoat 2010](#)). As pointed out by [Butler \(2020\)](#) in a diagnosis about the pandemic: the virus does not discriminate, but machismo, xenophobia, racism, and capitalism engender processes of exclusion and intensification of precarious experiences.

Therefore, it is vital to study the consequences of the COVID-19 pandemic on the working conditions of the health workforce from such an intersectional perspective, given the context of Brazilian politics and society.

Methods

We undertook an online survey between September 15 and October 15, 2020, involving 1,263 health professionals working within the frontline of the SUS. A total of 1,659 responses were recorded, of which 396 were excluded because they did not contain complete information about (self-reported) gender. The rate of valid responses was 76 percent. The sample has a non-probabilistic characteristic, delimiting itself as a convenience sampling. Given the emergency nature of the pandemic and the lack of data on workforce profile, it was not possible to perform a random sample. However, the pandemic conditions of physical distancing and the need for rapid evidence facilitate greater acceptability of convenience sampling. We do not claim to make robust statistical inferences in this article ([Bryman 2016](#)).

Despite the statistical limitations, the sample is diverse professionally and regionally. The majority of participants were women, a profile concomitant

with other socioeconomic diagnoses of health professionals in Brazil. Respondents' profiles were structured according to their self-declared gender, race, profession, service, region in which they operate, years working, and age group. Most respondents declared themselves white (58 percent) and women (74 percent), white women being 45 percent of the total. Most black men and black/white women stated they worked as nurses (29.9 percent, 28.3 percent, and 30.4 percent, respectively), while most white men were physicians (25.8 percent). Further details are provided in the Online Appendix.

The data collection instrument was based on literature on health workforces and health emergencies (Khalid et al. 2016; Lai et al. 2020), and was subsequently reviewed by peers [scholars], specialists, and volunteer health professionals. The questionnaire comprised fifty-one distinct questions (binary, multiple choice, open, Likert scale) and sought to capture the respondents' perceptions about the frontline experience against COVID-19.

For systematic data analysis, we opted for descriptive statistics of binary indicators (Yes or No) from the variable breakdown of race and gender. The questions concentrated on the themes of materials (access to PPE, training, access to testing material), institutional support (supervisors' support, guidance, etc.), and psycho-emotional conditions (emotions, impact perception, and support).

We also analyzed the qualitative testimonies about the harassment experienced by health professionals (Saldaña 2015). The categorization followed a three-step logic, in which we sought to identify the nature of the reported harassment (humiliation, aggression, etc.), the precursor agent of the discriminatory action (superior, colleague, boss, secretary, etc.), and the context of occurrence. Therefore, the combined analysis of these variables allows us to comprehend how the gender and race of frontline professionals affect the ways they experience the COVID-19 pandemic.

Findings

Working Conditions: Access to Resources and Institutional Support

Several international studies point to the importance of ensuring minimum material conditions (such as access to quality PPE, testing, training, etc.) (Adams and Walls 2020; Zhang et al. 2020) for the performance of frontline professionals. Accordingly, we mapped participants' perception of access to these resources. Table 1 summarizes the positive results found in the indicators, disaggregated by gender and race.

White men received PPE more frequently (71.6 percent), which was also the case for white women and those with more training (58.7 percent). The same was not true for black men and women. There were further discrepancies between men and women receiving adequate training, with 58.7 percent of white men reporting this compared to 44 percent of black women. These

Table 1. Access to resources disaggregated by gender and race

Resource/gender and race	Access to personal protective equipment, percent	Training, percent	Testing, percent
White men	71.60	58.70	29.00
White women	69.60	50.80	31.80
Black men	56.70	52.60	34.00
Black women	57.30	44.00	26.00

Note: The percentages correspond to the positive answers to both questions, with 100 percent corresponding to the total number of respondents in each intersectional variable of gender and race: (i) black women ($N=361$); (ii) white women ($N=573$); (iii) black men ($N=97$); and (iv) white men ($N=155$).

results can be explained by the sample's professional profile (A 01), in which white women and men occupy most of the clinical positions, while black men and black women were more likely to be nursing technicians and CHWs.

Institutional support is also a crucial condition for the effective functioning of the workforce within the health system. By mapping perceptions of support by management, we identified that black women are those who feel least supported: while 69 percent of white men reported having received support from supervisors, only 54 percent of black women did. This gap is also observed for leadership guidelines (74 percent of positive responses came from white men compared to 65 percent from black women). The results show that the differences in institutional conditions are marked more by the race of respondents than by gender—black men perceive themselves in a worse position than white women. A white woman summarized the scenario experienced by these professionals:

Our bosses don't give us support. We are exposed and continuously lack support. Whether with tests or psychological support. When I got infected, I had to listen [to them claim] that I invented the symptoms. Several colleagues have experienced similar situations. It's very demotivating and sad. (Physician, white woman, Santa Catarina, South Brazil)

Mental Health and Physiological Conditions of Health Workforce during the Pandemic

The unpredictability and lack of consolidated scientific knowledge on COVID-19 has generated deep uncertainties and distress among the population (Sloan et al. 2020), and more specifically, among frontline health professionals (Ornell et al. 2020). We mapped participants' perceptions of fear concerning COVID-19. They are clearly marked by gendered and racial differences: while 69.7 percent of white men and 73.2 percent of black men

indicated fear of contagion, this was significantly higher for white women (80.3 percent) and black women (84.2 percent).

Along with feeling fear concerning COVID-19 infection, the perception of preparedness to work on the frontline is a subjective way of managing the crisis scenario. The data suggest that there is no clear gender discrepancy, although white men continue to show better indicators—66.5 percent say they feel prepared—and black women at the opposite end, whereby only 41.3 percent say they are prepared to undertake their work during the pandemic. The gendered distribution can draw some hypotheses about masculinity and the unconscious pressure to respond considering “professionalism” and “prepared for duty.”

Such gender analysis is essential since social determinants and structures often leave women more vulnerable to stress, exhaustion, and mental health deterioration (Carli 2020), suffering pressures related to work overload and requirement to adapt to the double (sometimes triple) working day. When we asked if respondents believed that their mental health had been impacted during the pandemic, 69 percent of black and white men said yes, compared to 83 percent of black and white women. Black and white women, as well as white men, presented comparable results when asked about the support received to take care of their mental health during the pandemic (29 percent stated yes). Amongst black men, however, 23 percent said they had received support to take care of the emotional burden associated with working on the frontline.

A qualitative analysis of the free text exemplifies how restrictions imposed by the pandemic affected health professionals’ relationship with support structures. In the United States, it was reported that female health professionals frequently isolated themselves to avoid contaminating the family, which caused mental anguish (Carli 2020). The physical distancing of coworkers also appears to aggravate stress, loneliness, and sadness among women on the frontline:

As I work on the frontline in this pandemic, I didn’t see my daughter for a month and didn’t hug my parents. I felt such loneliness having to talk to them by video call . . . the pain was surreal, wanting to be near [them] and not being able [to be]. It was the only way to keep them safe and secure. (CHW, black woman, Amazonas, North Brazil)

Devaluation of the NASF’s (“Núcleo de Atenção à Saúde da Família” or Family Health Care Attention) work, which I used to undertake with other professionals and great friends, so much so that during the pandemic they ended the program and separated us, sending each one to different locations which, given the current situation, greatly affected our psychological health. At no time did the leadership show empathy. (Physiotherapist, black woman, Santa Catarina, South Brazil)

We also asked about emotions of health professionals during the pandemic period which were predominantly negative, such as stress and anxiety. Women and men, in general, presented similar results, with approximately 75 percent concerned emotionally. However, 72 percent of black men said they felt tired, compared to 63 percent of black women, 68 percent of white women, and 61 percent of white men. Black women also stated that they felt sadder during the pandemic (53 percent) compared to the other groups (which on average was 48 percent). Regarding positive emotions, men pointed towards having more hope (56 percent for white men and 55 percent for black men) than women did (52 percent for white women and 47 percent for black women).

Workplace Harassment

The COVID-19 pandemic, as an exogenous shock, has catalyzed moments of tension, insecurity, and pressure in the workplace, and strained relationships. We sought to understand the respondents' perception of harassment and bullying practices in the workplace: 66 percent said they had not suffered bullying and 34 percent said they had, 16 percent said this had increased during the pandemic, 7 percent believe it started with the pandemic, and 10 percent said it had remained the same as the previous period. Black women reported greater occurrences of harassment cases (38 percent), followed by white women (34 percent), black men (32 percent), and white men (25 percent). Once again, gender and race determine the psycho-emotional and institutional precariousness experienced by the health workforce during the pandemic.

A qualitative analysis of the testimonies indicates that most cases of harassment involved healthcare workers' supervisors—including coordinators, managers, bosses, etc. Harassment by families and patients also emerges with health professionals seen as "COVID-19 vectors" (those likely to spread the disease), especially CHWs who are embedded within the communities in which they live and work. Devaluation, discouragement, and lack of hope were the main feelings captured by analyzing these testimonies. The narratives demonstrate humiliation, excessive demands, threats, and embarrassment in relation to availability of and training with PPE, linked to coercion and peer pressure to work in unsafe conditions (without proper equipment, training, and guarantee of labor rights). This might be new or intensified by the crisis context, in which, as Bouveaur ([Souza, Coelho, and Marques 2020](#)) once said in the nineteenth century, women's rights are the ones threatened first.

It is frustrating and humiliating for you to be a health professional and see everything, whilst there is no safety at work. The tests are done for those who least need or do not need them at all, with employees at the back of the queue. That is humiliating, the total neglect discourages us. (CHW, black woman, Bahia, Northeast)

I'm the oldest on the team and the most recently hired. My immediate boss screams at me in team meetings. They've put me in challenging situations. They've already questioned my competence in front of everyone. They've already interfered with my work process, preventing me from bonding with patients. (Psychologist, black woman, Ceará, Northeast)

I was excluded along with my son, who is a 4-year-old, because I work in health care and some think I'll be infected and infect other people. That's prejudice. (Service manager, white woman, São Paulo, Southeast)

I'm pregnant and my boss demanded that I continue seeing patients normally. She accused me of using my pregnancy to avoid work. In addition to being pregnant I became hypertensive. PPE was a nursing priority, and my room was only cleaned 1× a week and only the floor. I had to clean my room. (Physiotherapist, white woman, Santa Catarina, South)

COVID shifts were not negotiable and the managers lacked understanding often as to the difficulty of dealing with a child with no school (they did not permit teleworking, not even temporarily at the beginning of the pandemic) (Physician, Black Woman, Federal District, Midwest)

In this context, we identify a crucial gender component amid reported harassment practices, in which cases of discrimination on the grounds of motherhood, humiliation, and verbal aggression expose sexist behaviors. The main aggressors are also identified as men, which can shed light on gender hierarchies on the frontline, despite there being a dominance of women. This mirrors studies that discuss the moral harassment of women (and in particular non-white women) workers in the public sector (Grazina and Magalhães 2012; Lewis and Gunn 2007). Women and ethnic minorities tend to suffer more bullying and harassment in the workplace, becoming an aggravating factor in cases where there is intersectionality of different social dimensions (Grazina and Magalhães 2012). As reported by Lewis and Gunn (2007) discrimination and harassment practices are most often exercised by line managers (predominantly through overload, excessive monitoring, excessive criticism, information retention, and rejection) and coworkers of the same level (predominantly through jokes, racist comments, humiliations, and hostility).

Discussion

The results described show that black women healthcare workers are the group which suffers the most direct and indirect consequences of the

pandemic in all the categories analyzed: access to resources, institutional support, mental health, and harassment. However, racial division was more crucial than gender in relation to determining access to resources, with black men having worse institutional conditions than white women, besides being the group that reported receiving less mental health support and experiencing greater feelings of tiredness. The systemic reproduction of structural racism in the implementation of health policies and the health workforce may be a driving factor in these results (Milanezi et al. 2020). This structural racism cannot be untangled from the colonial legacy that places black women and men in underprivileged social positions, with less access to formal education and hence occupying positions that are underpaid, under-recognized, and less protected, even though they are more vulnerable on the frontline of care work with direct contact with patients.

Thus, hierarchy in Brazilian health centers is highly racialized, with white women occupying more administrative roles than black women and men (Lombardi and Campos 2018). This inequality is tied to social class, economic power, access to education and racism, and has historical roots in the professionalization process of care labor. With the professionalization came a whitening of the standard image of the nurse, and black populations' traditional knowledge and practices, which were the basis of care during the colonial period, were gradually replaced by formal education which was associated with higher (predominantly white) social classes (Campos 2015).

As demonstrated above, the report of a black woman, CHW from Bahia, denouncing the existence of "employee patronage" is important to this discussion since we could argue that the prioritization of those who are less in need is an indication that there is a reproduction of privileges, reinforcing inequalities among health professionals. Thus, our results shed light on the importance of intersectional analyses of the diffuse effects of race and gender on women's experience in times of crisis. As Brazilian black feminists highlight (González 1982 Carneiro 2003; Hooks 2015), to be a woman and black in Brazil is to be the object of threefold discrimination, imposed by colonial patriarchal capitalism, which puts the white man in a position of extreme privilege and the black woman in the opposite extreme of oppression.

Gender, in turn, was a greater determinant of self-reported emotion, with women reporting more negative feelings than men. This difference may be related to cis-heteronormative male socialization, making it more difficult for men to assume their own vulnerability, which materializes while responding to the research questions, as well as a worse mental health conditions among women, who, as demonstrated, suffer more harassment, have their competence questioned, rights denied in relation to childcare and pregnancy, and experience precarious work. Previous research on Brazilian health workers has shown that CHWs (Alonso, Béguin, and Duarte 2018; Ursine, Trelha and Nunes 2010) and nurses (Bardaquim et al. 2019), predominantly women, suffered more from burnout (Telles and Pimenta 2009), stress, depression, and

anxiety—usually associated with longer shifts, poorer work conditions, and lack of recognition.

Moreover, these findings mirror research elsewhere in the world which has shown that gender is a key determinant of mental health during the pandemic. According to [Muller et al. \(2020\)](#), being a woman is the second largest risk factor associated with mental health problems, second only to exposure to patients with COVID-19. A study with women health professionals involved in the care of patients with COVID-19 in Wuhan (China) showed that women with more than ten years in work and two or more children are more susceptible to stress, depression, and anxiety, linked to exhaustion, family responsibilities, and overload of domestic work ([Li et al. 2020](#)).

In addition to the exacerbation of mental health issues among health professionals during the pandemic, gender norms influence access to training, career development, and the occupation of leadership positions in the services/organizations. Long-term effects are not yet clear, and cannot be precisely pointed out by our data, but past crises suggest that gender demands, rights, and equity might be threatened. As demonstrated, men had more access to training than women, occupying positions that require more years of education, with the exception of black men. A case study in Zimbabwe showed that among health professionals, men have more access to training than women because the latter have less time, given the unequal division of domestic work, and personal financial resources to invest in their career, given the pay gap ([Morgan et al. 2018](#)). Moreover, being married proved advantageous for men's careers and disadvantageous for women health professionals, who in many cases had to give up job opportunities and training to prioritize their husbands' career development ([Morgan et al. 2018](#)). In Uganda, it was observed that CHW men were more likely to be promoted to supervisory positions than women due to their privileged access to motor vehicles. In Cambodia, women in leadership positions, especially younger ones, said they felt less respected than men ([Morgan et al. 2018](#)).

Despite these gender differences in career development, as discussed above, white women have a privileged position in the health center's administration. However, women in managing positions can, as much as men, be part of a masculinized managerial culture, as demonstrated by one of the narratives about a woman accusing her subordinate of using pregnancy as an excuse for not working. They can also be constrained by this culture as much as women working under their supervision, as the coordinator who reported a lack of empathy among her employees, feeling overwhelmed by an excessive workload and the lack of time to care for her own family. [Kanter \(1977\)](#) suggests that women in leadership positions that are dominated by men can reproduce these men's behavior, acting as what has been called a "sociological male." Further research is necessary to investigate this supposition. Another possibility is a correlation to political affiliations rather than gender norms or management culture.

Since the 1990s, under the influence of neoliberalism and austerity policies, the management of the SUS has been guided towards private administration of so called “social organizations” that established “new models of health management,” operating with a medical–industrial logic (Andreazz and Bravo 2014). CHWs have reported important changes introduced by this new model, such as the focus on productivity based on the number of houses visited, on data collection rather than health education, and the prioritization of quantity over quality of work (Morosini, Fonseca, and Lima 2018; Nogueira 2019).

As Connell (2012) discusses, this neoliberal shift from public to private was influenced by global corporations, which are for the most part controlled by men, a managerial elite that is highly competitive and profit-focused, with little concern for the demands of working-class women and income-poor groups. On top of this, the precariousness of health professionals’ work is part of the global “crisis of care,” which concerns the growing incompatibility between care demand and the supply of people available to undertake this work, whether in families or in public services (Leão et al. 2020). According to the Federal Nursing Council (Cofen), the number of nursing professionals in Brazil is not sufficient to meet the demand for work imposed by the pandemic (Cofen 2020a).

The pandemic has reduced the social invisibility of nonmedical health professionals, especially nurses, celebrated by WHO as the “backbone” of any health system (World Health Organization 2020c). However, what we observed in Brazil is a recognition limited to discourse by the government, while in practice there are no improvements in salary and labor rights. During the pandemic, we noted that some organizations, including Cofen (Federal Council of Nursing) and Conacs (National Confederation of Community Health Workers), were active in reclaiming healthcare worker’s rights that had been neglected by governments (Cofen 2020b; Segatto 2020).

An increase in violence against health professionals has been reported globally and some countries have adopted prevention and punishment measures for these acts (Devi 2020). Healthcare users’ aggression against health professionals is not a new phenomenon in Brazil, and is mostly related to dissatisfaction with the service provided (Batista et al. 2011).

The fear of interaction and risks of contagion between users and professionals is exacerbated, as occurred in 1918 during the Spanish influenza pandemic. The fear of the “other” is memorialized socially whereby health professionals were attacked and the population felt extremely insecure (Schwarcz and Starling 2020). Stigmatization and fear of infection has been documented in public responses to several diseases, but one of the most emblematic cases was the AIDS epidemic, when patients suffered widespread stigma, as did health professionals, with many fearing interaction with these professionals would result in disease transmission (Marshall et al. 1990). Moreover, care practices, usually associated with women and femininity, are

reconfigured by the imposition of social distancing and mandatory use of PPE—imposing barriers to empathy, touch, and interactions expected by users. Narratives from our study pointed to a certain atmosphere of fear, emotional distance, and insecurity that separate patients from health professionals. Further studies on this topic would be helpful to understand the factors associated with the stigmatization of health professionals in the context of COVID-19, especially how this may relate to gender. The stigma of health workers can also impact how women who work in care are seen and treated by patients and society. Gendered and racist stereotypes can be reproduced in this process. These issues make evident the need for gender and racially mainstreamed public policies, and the central role played by the state in guaranteeing basic rights and social justice (Marcondes, Diniz, and Farah 2018). We must develop mechanisms to expand psychological support to health professionals and protect them from aggression, in addition to ensuring appropriate salaries and workloads, and providing adequate training and institutional support, and protective equipment and additional support to those with caring responsibilities. These efforts should be directed towards women, and in particular black women, in Brazil to overcome systemic and historical injustices, and to increase gender equality in the sector.

De Henau and Himmelweit (2020) argue that investment in the care economy promotes employment, reduces the gender employment gap and would be a first step in building a resilient, sustainable, and more equal economy in the recovery from the economic crisis caused by coronavirus in the United Kingdom. Contrary to this, in Brazil the post-pandemic economic recovery plan, called *Pró-Brasil*, makes no reference to gender and does not detail how investments will be made for health policies (Brasil 2020). In Brazil's current context of discrediting education, science denialism, and the rising power of the extreme right, researchers play a critical role in defending the SUS and maintaining the country's historical leadership of a critical vision in global health policy by promoting approaches that are centered on people and the environment (Ventura et al. 2020).

As Ramm (2020) discusses, performing paid work facilitated economic autonomy for women. However, it did not lead to an improvement in gender equality, since it was not accompanied by a sharing of domestic work with men. As Hirata and Kergoat (2007) suggest, with the sexual division of labor “everything changes, but nothing changes.” On the other hand, feminist theorists have been signaling that gender is not static and goes beyond traditional labor divisions and statistical differences between women and men considered as a homogeneous group; gender is an active social process made by relations that are in constant transformation along historical periods, involving diverse bodies and institutions (Connell 2012).

The current health crisis context imposes new challenges to gender relations at global and local levels that are only beginning to be studied, notwithstanding the accelerated speed of research due to the health emergency.

This study is an initial contribution to understanding such a context that has roots in the past and will have significant impacts in the future.

Conclusion

This article deepens the argument that the analysis of the COVID-19 pandemic through gendered and racial lenses is necessary to expose inequities and vulnerabilities that are embodied in professional practices and lived experience in society. Such dimensions are generally invisible in biomedical research, as well as in epidemiological and economic data. In this sense, gender analysis about and with health professionals is fundamental to produce reflections and propositions on the relations between health, care, gender, race, and between state and society.

Thus, investigating the working conditions of women public servants, and in particular black women who deliver and implement health policies, allows us to identify ways in which gender and racial inequalities are produced and reproduced in the welfare bulge. An intersectional perspective is fundamental to developing policies based on the complexity of gender relations, which cannot be captured by homogeneous and binary categorizations of women and men, thus contributing to the strengthening of a feminist epistemology that centers women narratives and points of views towards social issues (Haraway 1995). In this way, our studies draw attention to women's experiences that could not be seen as universal and men-centered (Matos 2008).

Funding

This work was supported by the Gender and COVID-19 Project, which is supported by the Bill & Melinda Gates Foundation under investment INV-017300; Rede Covid-19 Humanidades MCTI under grant 0464/20 FINEP/UFRGS; Wellcome Trust Grant 218750/Z/19/Z; LSE Latin American and Caribbean Centre; and Oswaldo Cruz Foundation (Fiocruz).

Supplementary Data

Supplementary data can be found at www.socpol@oup.com

References

- Adams, James G., and Ron M. Walls. 2020. Supporting the health care workforce during the COVID-19 global epidemic. *Journal of American Medical Association* 323 (15): 1439–1440.
- Aguiar, Bruna Soares, and Matheus Ribeiro Pereira. 2019. O antifeminismo como backlash nos discursos do governo Bolsonaro. *Agenda Política* 7 (3): 8–35.

- Alonso, Carolina Maria do Carmo, Daniel Béguin, and Francisco Duarte. 2018. Trabalho dos agentes comunitários de saúde na Estratégia Saúde da Família: metassíntese. *Revista de Saúde Pública* 5 (14): 1–13.
- Amnesty International. 2020. Global: Amnesty analysis reveals over 7,000 health workers have died from COVID-19. *Amnesty International*, September 3, 2020.
- Antonopoulos, Rania. 2009. The Unpaid Care Work—Paid Work Connection, Working Paper No. 86. Geneva: Policy Integration and Statistics Department International Labour Office.
- Baqui, Pedro, Iona Bica, Valerio Marra, Ai Ercole, and Mihalea van der Schaar. 2020. Ethnic and regional variations in hospital mortality from COVID-19 in Brazil: A cross-sectional observational study. *Lancet Global Health* 8 (8): e1018–e1026.
- Barbosa, Regina Helena S., Clarissa Alves Fernandes de Menezes, Helena Maria Scherlowski Leal David, and Vera Joana Bornstein. 2012. Gênero e trabalho em saúde: um olhar crítico sobre o trabalho de agentes comunitárias/os de saúde. *Interface-Comunicação, Saúde, Educação* 16 (42): 751–65.
- Bardaquim, Vanessa Augusto, Ernandes Gonçalves Dias, Rita de Cássia de Marchi Barcellos Dalri, and Maria Lúcia do Carmo Cruz Robazzi. 2019. Reflexão sobre as condições de trabalho da enfermagem: subsídio às 30 horas de trabalho. *Revista Enfermagem Contemporânea* 8 (2): 172–81.
- Bastos, Gabriela, Flávia Carbonari, and Paula Tavares. 2020. *O Combate à Violência contra a Mulher (VCM) no Brasil em época de COVID-19*. Washington, DC: Grupo Banco Mundial.
- Batista, Cássia Beatriz, Augusto de Souza Campos, Juliana do Carmo Reis, and Virgínia Torres Schall. 2011. Violência no trabalho em saúde: análise em unidades básicas de saúde de Belo Horizonte, Minas Gerais. *Trabalho, Educação e Saúde* 9 (2): 295–317.
- Bhala, Neeraj, Gwenetta Curry, Adrian R. Martineau, Charles Agyemang, and Raj Bhopal. 2020. Sharpening the global focus on ethnicity and race in the time of COVID-19. *Lancet* 395 (10238): 1673–1676.
- Billings, Jo, Brian Chi Fung Ching, Vasiliki Gkofa, Talya Greene, and Michael Bloomfield. 2020. Healthcare workers experiences of working on the frontline and views about support during COVID-19 and comparable pandemics: A rapid review and meta-synthesis. *medRxiv*. Preprint.
- Blofield, Merike, Christina Ewig, and Jennifer M. Piscopo. 2017. The reactive left: Gender equality and the Latin American pink tide. *Social Politics* 24 (4): 345–69.
- Brasil. 2020. Pró-Brasil: Casa Civil apresenta projeto de reestruturação do Brasil pós-pandemia. Retrieved from www.gov.br
- Bryman, Alan. 2016. *Social research methods*. London: Oxford University Press.
- Butler, Judith. 2020. O capitalismo tem seus limites. *Blog da Boitempo*. Available at <https://blogdaboitempo.com.br/2020/03/20/judith-butler-sobre-o-covid-19-o-capitalismo-tem-seus-limites/> (last modified March 20), accessed March 19, 2021.
- Campos, Paulo Fernando de Souza. 2015. As enfermeiras da Legião Negra: representações da enfermagem na revolução constitucionalista de 1932. *Faces de Eva* 33: 53–65.
- Carli, Linda L. 2020. Women, gender equality and COVID-19. *Gender in Management: An International Journal* 35 (7–8): 647–55.
- Caponi, Sandra. 2020. Covid-19 no Brasil: entre o negacionismo e a razão neoliberal. *Estudos Avançados* 34: 209–24.

- Carneiro, Sueli. 2003. Enegrecer o feminismo: A situação da mulher negra na América Latina a partir de uma perspectiva de gênero. *Racismos contemporâneos*. Rio de Janeiro: Takano Editora.
- Castro, Marcia. 2020. Lack of federal leadership hinders Brazil's COVID-19 response [Interview]. June, 25. Advance Access Published December 30; <https://www.hsph.harvard.edu/news/features/brazil-covid-marcia-castro/>.
- Connell, Raewyn. 2012. Gender, health and theory: Conceptualizing the issue, in local and world perspective. *Social Science and Medicine* 74: 1675–1683. (não tem issue).
- Conselho Federal de Enfermagem (Cofen). 2020a. Demandas de décadas da Enfermagem se sobressaem no combate à pandemia. *Portal Cofen*. Accessed from <http://www.cofen.gov.br/> on April 9, 2021.
- . 2020b. Recomendações gerais para organização dos serviços de saúde e preparo das equipes de enfermagem. *Portal Cofen*. Accessed from http://www.cofen.gov.br/wp-content/uploads/2020/03/cofen_covid19_comp.pdf on April 19 2021.
- Covid Inequality Project. 2020. Covid Inequality Project. Advance Access Published October 3; <https://sites.google.com/view/covidinequality/>.
- De Henau, Jerome, and Susan Himmelweit. 2020. A care-led recovery from Coronavirus. The case for investment in care as a better post-pandemic economic stimulus than investment in construction. *Women's Budget Group* 27 (1): 1–10.
- Dembroff, Robin. 2020. In this moment of crisis, macho leaders are a weakness, not a strength. *The Guardian*, April 13.
- Devi, Sharmila. 2020. COVID-19 exacerbates violence against health workers. *Lancet* 396 (10252): 658.
- Dye, T. D., Lisette Alcantara, Shazia Siddiqi, Monica Barbusu, Saloni Sharma, Tiffany Panko and Eva Pressman. 2020. Risk of COVID-19-related bullying, harassment and stigma among healthcare workers: an analytical cross-sectional global study. *BMJ Open* 10 (12): 1–15.
- Estrela, Fernanda Matheus, Caroline Fernandes Soares e Soares, Moniky Araújo da Cruz, Andrey Ferreira da Silva, Jemima Raquel Lopes Santos, Tânia Maria de Oliveira Moreira, Adriana Braitt Lima, and Márcia Gomes Silva. 2020. Pandemia da Covid 19: refletindo as vulnerabilidades à luz do gênero, raça e classe. *Ciência & Saúde Coletiva* 25 (9): 3431–3436.
- Feinstein, Robert E., Sussann Kotara, Barbara Jones, Donna Shanor, and Charles B. Nemeroff. 2020. A health care workers mental health crisis line in the age of COVID-19. *Depression and Anxiety* 37 (8): 822–26.
- Ferigato, Sabrina, Michelle Fernandez, Melania Amorim, Ilana Ambrogi, Luiza M. M. Fernandes and Rafaela Pacheco. 2020. The Brazilian Government's mistakes in responding to the COVID-19 pandemic. *Lancet* 396 (10263): 1636.
- Ferraz, Adriana. 2020. Bolsonaro diz que é preciso 'enfrentar vírus como homem e não como moleque'. *Uol Notícias*, March 29, 2020.
- Ginette Azcona, A. B., Sara Davies, Sophie Harman, Julia Smith, and Clare Wenham. 2020. *Spotlight on gender, COVID-19 and the SDGs: Will the pandemic derail hard-won progress on gender equality?* New York: UN Women.
- Gênero e Número. 2020. Organização Gênero e Número em parceria com a Sempreviva Organização Feminista. Sem Parar: O Trabalho e a Vida das Mulheres na Pandemia. 2020. <http://mulheresnapandemia.sof.org.br/>.

- González, Lélia. 1982. A mulher negra na sociedade brasileira. In *O lugar da mulher; estudos sobre a condição feminina na sociedade atual*, 89–106. Rio de Janeiro: Graal.
- Grazina, Isabel, and José Magalhães. 2012. Moral harassment at work: The relationship with organizational culture. *Journal of Business & Retail Management Research* 7 (1): 12–26.
- Guirado, Marlene. 2019. Entre Discurso e Ato, há muito mais do que se imagina. *Psicologia USP* 30 (e190027): 1–9.
- Haraway, Dora. 1995. Saberes localizados: A questão da ciência para o feminismo e o privilégio da perspectiva parcial. *Cadernos Pagu* 5: 7–41.
- Harman, Sophie. 2016. Ebola, gender and conspicuously invisible women in global health governance. *Third World Quarterly* 37 (3): 524–41.
- Hirata, Helena. 2016. O trabalho de cuidado. *Sur: Revista Internacional De Direitos Humanos* 13 (1): 53–64.
- Hirata, Helena, and Danielle., Kergoat 2007. Novas configurações da divisão sexual do trabalho. *Cadernos de pesquisa* 37 (132): 595–609.
- Hooks, Bell. 2015. Mulheres negras: moldando a teoria feminista. *Revista Brasileira de Ciência Política* 16: 193–210.
- Institute, G. 2020. The COVID-19 Outbreak: Potential fallout for sexual and reproductive health and rights. Available at <https://www.gutmacher.org/article/2020/03/covid-19-outbreak-potential-fallout-sexual-and-reproductive-health-and-rights> (last modified March 11, 2020), accessed January 13, 2021.
- Jardine, Jennifer, S. Relph, L. A. Magee, P. von Dadelszen, E. Morris, M. Ross-Davie, T. Draycott, and A. Khalil 2020. Maternity services in the UK during the COVID-19 pandemic: A national survey of modifications to standard care. *BJOG: An International Journal of Obstetrics & Gynaecology* 128 (5): 880–89.
- Kalkmann, Suzana, Claudete Gomes dos Santos, Luís Eduardo Batista, and Vanessa Martins da Cruz. 2007. Racismo institucional: um desafio para a equidade no SUS? *Saúde e Sociedade* 16 (2), 146–155.
- Kanter, Rosabeth Moss. 1977. *Men and women of the corporation*. New York: Basic Books.
- Kergoat, Danielle. 2010. Dinâmica e consubstancialidade das relações sociais. *Novos estudos CEBRAP* (86): 93–103.
- Khalid, Imran, Tabindeh J. Khalid, Mohammed R. Qabajah, Aletta G. Barnard, and Ismael A. Qushmaq 2016. Healthcare workers' emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. *Clinical Medicine & Research* 14 (1): 7–14.
- Kopel Jonathan, Jonathan Kopel, Abhilash Perisetti, Ali Roghani, Muhammad Aziz, Mahesh Gajendran, and Hemant Goyal. 2020. Racial and gender-based differences in COVID-19. *Frontiers in Public Health* 8 (1): 418.
- Lai Jianbo, Simeng Ma, Ying Wang, Zhongxiang Cai, Jianbo Hu, Ning Wei, Jiang Wu et al. 2020. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open* 3 (3): e203976–e203976.
- Lapolla, Pierfrancesco, Andrea Mingoli, and Lee Regen. 2020. Deaths from COVID-19 in healthcare workers in Italy—What can we learn? *Infection Control & Hospital Epidemiology* 42 (3): 364–65.

- Leal, Maria do Carmo, Silvana Granado Nogueira da Gama, Ana Paula Esteves Pereira, Vanessa Eufrauzino Pacheco, Cleber Nascimento do Carmo, and Ricardo Ventura Santos. 2017. A cor da dor: Iniquidades raciais na atenção pré-natal e ao parto no Brasil. *Cadernos de Saúde Pública* 33 (1): 1–17.
- Leão, Natália, Renata Moreno, Giulliana Bianconi, Marília Ferrari, and Helena Zelic e Thandara Santos. 2020. Trabalho E Vida Das Mulheres Na Pandemia. In *A devastação do trabalho: A classe do labor na crise da pandemia*, 289–309. Brasília: Editora Positiva.
- Lebel, C., A. MacKinnon, M. Bagshawe, L. Tomfohr-Madsen, and G. Giesbrecht 2020. Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic. *Journal of Affective Disorders* 277 (Special Issue): 5–13.
- Lewis, Duncan, and Rod Gunn 2007. Workplace bullying in the public sector: Understanding the racial dimension. *Public Administration* 85 (3): 641–665.
- Li, Guo, Jinfeng Miao, Hui Wang, Shabei Xu, Wenzhe Sun, Yebin Fan, Chenyan Zhang, Suiqiang Zhu, Zhou Zhu, Wei Wang. 2020. Psychological impact on women health workers involved in COVID-19 outbreak in Wuhan: a cross-sectional study. *Journal of Neurology, Neurosurgery, and Psychiatry* 91 (8): 895–97.
- Liu, Qian, Dan Luo, Joan Haase, Qiaohong Guo, Xiao Qin Wang, Shuo Liu, Lin Xia, Zhongchun Liu, Jiong Yang e Bing, Xiang Yang. 2020. The experiences of health-care providers during the COVID-19 crisis in China: A qualitative study. *The Lancet Global Health* 8 (6): e790–e798.
- Loibner, Martina, Sandra Hagauer, Gerold Schwantzer, Andrea Berghold, and Kurt Zatloukal. 2019. Limiting factors for wearing personal protective equipment (PPE) in a health care environment evaluated in a randomised study. *PloS One* 14 (1): e0210775.
- Lombardi, Maria Rosa, and Veridiana Parahyba Campos. 2018. A enfermagem no Brasil e os contornos de gênero, raça/cor e classe social na formação do campo profissional. *Revista da ABET*, 17 (1): 28–46.
- Marcondes, Mariana, Ana Diniz, and Marta Ferreira Santos Farah. 2018. Transversalidade de gênero: uma análise sobre os significados mobilizados na estruturação da política para mulheres no Brasil. *Revista do Serviço Público* 69 (2): 35–61.
- Marshall, Patricia, A. ÓKeefe, J. Paul, and S. G. Fisher 1990. Touch and contamination: Patient's fear of AIDS. *Medical Anthropology Quarterly* 4 (1): 129–44.
- Magalhães, Rosana. 2016. Avaliação da Política Nacional de Promoção da Saúde: perspectivas e desafios. *Ciência and Saúde Coletiva*, 21(6): 1767–1776.
- Matos, Marlise. 2008. Teorias de gênero ou teorias e gênero? Se e como os estudos de gênero e feministas se transformaram em um campo novo para as ciências. *Revista Estudos Feministas* 16 (2): 333–57.
- Matsuo, T., D. Kobayashi, F. Taki, F. Sakamoto, Y. Uehara, N. Mori, and T. Fukui 2020. Prevalence of health care worker burnout during the coronavirus disease 2019 (COVID-19) pandemic in Japan. *JAMA Network Open* 3 (8): e2017271–e2017271.
- Milanezi Jaciane, Hugo Nicolau de Gusmão, Caio Jardim Sousa, Thayla Bicalho Bertolozzi, Gabriela Lotta, Michelle Fernandez, Marcela Corrêa, Elaine Vilela, and Cláudia Ayer. 2020. Mulheres negras na pandemia: O caso de Agentes Comunitárias de Saúde (ACS). *Informativos Desigualdades Raciais e Covid-19, AFRO CEBRAP* 5: 1–51.

- Ministry of Health. 2020. Boletim epidemiológico especial—doença pelo coronavírus COVID-19. *Secretaria de Vigilância Sanitária*, October 23, 2020.
- Morgan, Rosemary, Richard Mangwi Ayiasi, Debjani Barman, Stephen Buzuzi, Charles Ssemugabo, Nkoli Ezumah, Asha S. George, Kate Hawkins, Xiaoning Hao, Rebecca King et al. 2018. Gendered health systems: evidence from low- and middle-income countries. *Health Research Policy and Systems* 16 (58):1–12.
- Morosini, Márcia, Angélica Ferreira Fonseca and Luciana Dias de Lima. 2018. Política Nacional de Atenção Básica 2017: Retrocessos e riscos para o Sistema Único de Saúde. *Saúde em Debate* 42 (116): 11–24.
- Muller, Ashley Elizabeth, Elisabet Vivianne Hafstada, Jan Peter William Himmelsa, Geir Smedslunda, Signe Flottorpa, Synne Øien Stenslandb, Stijn Stroobantsc, Stijn Van de Veldea and Gunn Elisabeth Vist. 2020. The mental health impact of the COVID-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry Research* 293 (113441): 1–11.
- Nogueira, Mariana Lima. 2019. Expressões da precarização no trabalho do agente comunitário de saúde: burocratização e estranhamento do trabalho. *Saúde e Sociedade* 28 (3): 309–23.
- Nunes, João. 2020. The everyday political economy of health: Community health workers and the response to the 2015 Zika outbreak in Brazil. *Review of International Political Economy* 27 (1): 146–66.
- Observatório das Desigualdades. 2020. A extrema pobreza cresce no Brasil e pode aumentar com a crise do Coronavírus. *Fundação João Pinheiro*, April 13, 2020.
- Ornell, Felipe, Silvia Chwartzmann Halpern, Felix Henrique Paim Kessler, and Joana Corrêa de Magalhães Narvaez. 2020. The impact of the COVID-19 pandemic on the mental health of healthcare professionals. *Cadernos de Saúde Pública*, 36 (4): 1–6.
- Paternotte, David, and Roman Kuhar. 2017. The anti-gender movement in comparative perspective. In: *Anti-gender campaigns in Europe. Mobilizing against equality*, 253–76. Lanham, MD: Rowman & Littlefield.
- Peterman, Amber, Alina Potts, Megan O'Donnell, Kelly Thompson, Niyati Shah, Sabine Oertelt-Prigione. 2020. Pandemics and Violence against Women and Children, Working Paper No. 528. CGDev.
- Ramírez, Gabriela A. 2020. Gender ideology, Catholic neointegrismo, and evangelical fundamentalism: The anti-democratic vocation. In *Anti-gender politics in Latin America: Country case studies summaries.*, ed. Corrêa, Sônia, 20–34. Rio de Janeiro: Associação Brasileira Interdisciplinar de Aids.
- Ramm, Alejandra. 2020. Latin America: A fertile ground for maternalism. In *Motherhood, social policies and women's activism in Latin America*, 13–37. London: Palgrave Macmillan.
- Relação Anual de Informações Sociais (RAIS). 2015. Ministério do Trabalho e Emprego, Programa de Disseminação das Estatísticas do Trabalho. Brasília, DF.
- Rossi, Marina. 2019. Debora Diniz: “Não sou desterrada. Não sou refugiada. Qual é a minha condição?” *El País Brasil*, June 17, 2019.
- Rothermel, Ann Kathrin. 2020. “The other side”: Assessing the polarization of gender knowledge through a feminist analysis of the affective-discursive in anti-feminist online communities. *Social Politics* 27 (4): 1–25.
- Saldaña, Johnny. 2015. *The coding manual for qualitative researchers*. London: Sage.

- Santos, Debora de Souza, Mariane de Oliveira Menezes, Carla Betina Andreucci, Marcos Nakamura-Pereira, Roxana Knobel, Leila Katz, Heloisa de Oliveira Salgado, Melania Maria Ramos de Amorim, and Maira Takemoto. 2020. Disproportionate impact of coronavirus disease 2019 (COVID-19) among pregnant and postpartum black women in Brazil through structural racism lens. *Clinical Infectious Diseases*. Correspondence.
- Schwarz, Lilia Moritz, and Heloisa Murgel Starling. 2020. *A bailarina da morte: a gripe espanhola no Brasil*. Rio de Janeiro: Companhia das Letras.
- Scheffer, Mário, Alex Cassenote, Alexandre Guerra, Aline Gil Alves Guilloux, Ana Pérola Drulla Brandão, Bruno Alonso Miotto, Cristiane de Jesus Almeida, Jackeline Oliveira Gomes and Renata Alonso Miotto. 2020. *Demografia Médica no Brasil*. São Paulo, SP: FMUSP, CFM.
- Segatto, Cristiane. 2020. Na guerra política dentro da pandemia, o SUS precisa sair fortalecido. <https://www.uol.com.br/vivabem/colunas/cristiane-segatto/2020/06/03/na-guerra-politica-dentro-da-pandemia-o-sus-precisa-sair-fortalecido.htm?cmpid=copiaecola>.
- Shanafelt, T., J. Ripp, and M. Trockel. 2020. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *Journal of American Medical Association* 323 (21): 2133–2134.
- Sloan, Melissa, Murat Haner, Amanda Graham, Francis T. Cullen, Justin T. Pickett, and Cheryl Lero Jonson. 2020. Pandemic emotions: The extent, correlates, and mental health consequences of personal and altruistic fear of COVID-19. Preprint.
- Smith, Julia. 2019. Overcoming the ‘tyranny of the urgent’: Integrating gender into disease outbreak preparedness and response. *Gender & Development* 27 (2): 355–69.
- Souza, Paula Sant’anna Machado, Nálida Coelho, and Camila Marques. 2020. Basta uma crise para que os direitos das mulheres sejam questionados. *Justificando.com*, August 13, 2020.
- Telles, Heloisa, and Ana Maria Carvalho Pimenta. 2009. Síndrome de Burnout em Agentes comunitários de saúde e estratégias de enfrentamento. *Saúde e Sociedade* 18 (3): 467–78.
- Ursine, Bárbara Lyrio, Celita Salmaso Trelha, and Elisabete de Fátima Polo Almeida Nunes. 2010. O Agente Comunitário de Saúde na Estratégia de Saúde da Família: uma investigação das condições de trabalho e da qualidade de vida. *Revista Brasileira de Saúde Ocupacional* 35 (122): 327–39.
- Ventura, Deisy de Freitas Lima, Helena Ribeiro, Gabriela Marques di Giulio, Patrícia Constante Jaime, João Nunes, Cláudia Maria Bógus, José Leopoldo Ferreira Antunes and Eliseu Alves Waldman. 2020. Challenges of the COVID-19 pandemic: For a Brazilian research agenda in global health and sustainability. *Cadernos de Saúde Pública* 36 (4): e00040620.
- Vieira, Fabiula Sulpino, Isabela Soares Santos, Carlos Reis, and Paulo Rodrigues. 2018. *Políticas sociais e austeridade fiscal: Como as políticas sociais são afetadas pelo austericídio da agenda neoliberal no Brasil e no mundo*. Rio de Janeiro: CEBES.
- Wenham, Clare. 2021. *Feminist global health security*. New York: Oxford University Press.
- Wenham, Clare, João Nunes, Gustavo Correa Matta, Carolina de Oliveira Nogueira, Polyana Aparecida Valente, and Denise Nacif Pimenta. 2020. Gender

- mainstreaming as a pathway for sustainable arbovirus control in Latin America. *PLoS Neglected Tropical Diseases* 14 (2): 1–7.
- Wenham, Clare, Julia Smith, and Rosemary Morgan. 2020. COVID-19: The gendered impacts of the outbreak. *Lancet* 395 (10227): 846–48.
- World Health Organization. 2019. Delivered by women, led by men: a gender and equity analysis of the global health and social workforce. Retrieved from <https://apps.who.int/iris/handle/10665/311322>.
- . 2020a. *Gênero e COVID-19 na América Latina e no Caribe: Dimensões de gênero na resposta*. Geneva: World Health Organization.
- . 2020b. *Gender and COVID-19: Advocacy Brief*. Geneva: World Health Organization.
- . 2020c. *Year of the Nurse and the Midwife*. Geneva: World Health Organization.
- Zhang, Stephen X., Jing Liu, Asghar Afshar Jahanshahi, Khaled Nawaser, Ali Yousefi, Jizhen Li, and Shuhua Sun. 2020. At the height of the storm: Healthcare staff's health conditions and job satisfaction and their associated predictors during the epidemic peak of COVID-19. *Brain, Behavior, and Immunity* 92 (2021): 243–44.