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Work has moved home: remote work in the context of the COVID-19 pandemic

O trabalho mudou-se para casa: trabalho remoto no contexto da pandemia de COVID-19

Abstract

Objective: to discuss the workers' experiences with the wide implementation of remote work activities, carried out at home, using information-communication technologies, in the context of the COVID-19 pandemic. Methods: based on official data and literature review, we discussed the characteristics of remote work (RW) and its potential repercussions, emphasizing gender issues. Results: control and prevention measures against COVID-19, especially social distance, changed social and family life. Part of the workers kept engaged in their work activities at home. RW was imposed even without the necessary structure and training conditions, intensifying the effects of the working hours without defined limits. At home, new demands were put forward (educational support for children and increased housework). Discussion: by losing its borders, the private world becomes public; the household is incorporated into the world of work. New questions emerge. What demands rise from this new productive-reproductive arrangement? What changes take place in household and family care activities? These issues tend to persist, even after the critical situation of the pandemic. Part of this way of operating work processes will remain and life in society will be shaped by these changes. These challenges should demand attention and interventions.

Keywords: occupational health; working conditions; remote work; gender inequality; housework.

Resumo

Objetivo: discutir os elementos vivenciados pelos(as) trabalhadores(as) com a ampla implementação de atividades laborais remotas, realizadas em casa, com auxílio das tecnologias de informação-comunicação, no contexto da pandemia de COVID-19. Métodos: com base em dados oficiais e revisão de literatura, discutemse características do trabalho remoto (TR) e suas potenciais repercussões, enfatizando-se questões de gênero. Resultados: medidas de controle e prevenção contra a COVID-19, sobretudo o distanciamento social, mudaram o cotidiano social e familiar. Uma parcela de trabalhadores(as) manteve suas atividades laborais em casa. O TR foi imposto sem as condições estruturais e de treinamento necessárias e intensificou os efeitos do trabalho sem limites temporais definidos. Em casa, novas demandas surgiram (acompanhamento escolar e aumento de demandas por higienização e limpeza). Discussão: com a perda de fronteiras, o mundo privado torna-se público, a casa é incorporada ao mundo do trabalho. Novas questões emergem. Quais demandas surgem nesse novo arranjo produtivo-reprodutivo? Quais alterações se produzem nas atividades domésticas e de cuidados da família? Essas questões tendem a perdurar, mesmo passada a situação crítica da pandemia. Parte desse modo de operar os processos de trabalho permanecerá, e a vida em sociedade será modulada por essas transformações. Esses desafios deverão mobilizar atenção e intervenção.

Palavras-chave: saúde do trabalhador; condições de trabalho; trabalho remoto; iniquidade de gênero; trabalho doméstico.

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Introduction

The themes addressed in this essay are not novel. Working from home, reconciling periods of work to home and family care are old dilemmas, especially in women's lives¹⁻³. It is an old but also current matter, since the COVID-19 pandemic has shed light on a wide range of issues that are still invisible.

The transformations generated by the nineteenth century industrial revolution – which created the factory and forged the separation between the private and public worlds, productive (paid work) and reproductive (domestic and care activities) lives, and which split and imprisoned affection in the family – are now turned upside down. The work activity, prevented from taking place in the "factory" space, had to seek a new address: moved home. At home, it reorganized life and amplified an almost invisible part of social life: work involved in the reproduction, now in direct dispute, in the same space and time, with productive work.

Like an unscheduled visitor, it arrived without prior notice, arrangement or organization. All done in an improvised way. Professional work and remote work, now without clear spaces of belonging and time delimitation, mix up and prolong workdays. In addition to doing something unprecedented, it establishes conditions that reveal us: through technological means, what was private becomes public, accessible to others eyes, promoting a particular situation of unprotected intimacy. It is in our home, with our family, with our pets and with the sounds of our neighborhood that work is implanted and makes a good part of it visible to the other: a door opens on the computer screen and invades us, allowing access to a private, personal world, and, so far, protected in our intimacy.

In this context of the COVID-19 pandemic, home was transformed into a public space. But the abrupt changes that took place were not restricted to it: invasions, demands and requests also multiplied. For example, the workday without time limits was added to the requirements of providing the means and tools for remote work (such as Internet, computer and cell phone) and training to operate the electronic devices needed to connect with the outside world, as well as physical distancing measures and staying at home. In this scenario, a double tension rose: on the one hand, the requirements multiply, without proper preparation and training; on the other hand, the areas of escape from tensions have suffered drastic limitations due to the circulation restrictions as well as the social relationships and contacts. The wages reduction and the threat of losing the job add new elements to the dramatic situation. All these factors, together and overlapping, seem to threaten the workers' work capacity and mental health once and for all.

In this essay, an initial observation is required. The definition of work is not restricted to the concept of paid work (related to the productive sphere), but it involves the social reproduction sphere (domestic work) as well. The starting point for reflecting on working from home adopts a historical position which started in France in the 1970s and which has guided a tradition of research in this direction⁴. In this perspective, the concept of workday becomes broader.

The legal concept of workday refers to the time when the worker is at the company's disposal; referring to the labor time purchased by the capitalist⁵. The theoretical-conceptual link between "workday" and the productive sphere is perpetuated by the alliance between interests of capitalist accumulation and patriarchal power⁶, reinforcing the dimension of working time only in the productive sphere (male space that produces surplus value). Domestic work, in turn, produced mainly by women and as a non-profit activity, is not commonly considered work⁶. This restriction stimulated the defense of including the dimension of domestic work in the concept, and the need to consider workdays/ total workloads⁴.

Based on the sexual division of labor, these two working hours (professional and domestic) shape realities in women's lives⁷, supported by different mechanisms of male domination⁸ and power relations⁹. Besides, Ávila¹⁰ draws attention to the fact that the expression "double workday" does not characterize the presence of isolated hours, but rather of overlapping hours, becoming intensive, extensive and intermittent⁷. These are relevant aspects in the analysis of the productive work that migrates to home, causing an unprecedented juxtaposition of these working hours.

The purpose of this essay is to discuss the elements experienced by workers with the expanded implementation of remote work activities, carried out at home, with the help of information-communication technologies, in the context of the COVID-19 pandemic. The intention was to list the characteristics of this type of work, based on what is currently possible to map, and to discuss its potential repercussions, with an emphasis on gender issues. We conducted a literature survey using the descriptors teleworking, telework, mobile work, home office, home working, remote work and COVID-19. We selected texts that discussed the characteristics of

remote work (RW) and its potential and we consider data from official national and international surveys, such as the National Household Sample Survey (PNAD) COVID-19¹¹.

Working from home: telework, remote work

Literature shows the use of different terms for work carried out at home. The definition of concepts in this field is diverse and has significant temporal changes. Thus, numerous conceptual and vocabulary proposals are available 12. In the conceptual option adopted in this essay, it is worth mentioning that, even though the concepts of telework and RW are currently treated as synonyms, it is understood that they are different terms in the strict conceptual definition.

Work carried out outside the "factory" (workplace, owned by the employer, aimed at working and spending the workday), in this essay, involves concepts of RW, teleworking or working from a distance. These concepts are not new, although a number of inaugural elements can now be identified. In 1962, an English company, with the purpose of reducing the turnover of women employed in programming services, instituted the work from home, thus initiating one of the first experiences of this type of work, based on the use of technology¹³. Later, in the 1970s, the term telework was used for the first time¹⁴. However, the term became popular after the publication of the book The Telecommunications-Transportation Tradeoff¹⁵, which had Jack Nilles as one of its authors - Nilles is a former NASA engineer and worked on alternatives for transportation, considering issues arising from traffic, expansion and shortage of non-renewable resources. In Nilles' definition¹⁵, teleworking is the kind of work that allows achieving results using information technology, such as telecommunications and computers, instead of the peoples' physical movement. Thus, it corresponds to the possibility of "moving the work to the workers instead of moving the workers to work" (p. 87).

The first broader experiences of this work model were made in the early 1990s, at the American company AT&T, using a teleworking system that reached 55% of the employees of its branches in the USA¹⁶. A set of analyzes carried out in that decade regarding this new model of organization and management emphasized, above all, its benefits for workers and organizations: increased productivity, reduced absenteeism and overheads, making environmental regulations easier to be accomplished¹⁷.

Teleworking refers to a contract that establishes carrying out work outside the contracting company, and it is a flexible form of employment. In Brazil, teleworking was introduced in the 2017 labor reform, when intermittent work was regulated - a hiring modality that allows the company to hire an employee to work eventually and pay him/her only for that period. In the legislation, teleworking is defined as "[...] provision of services predominantly outside the employer's premises, using information and communication technologies that, by their nature, do not constitute external work" (art. 75-B of Law No. 13.467, of 2017)18. In this modality regulation, there is no control of the workday and there is no right to additional overtime, intra-shift and inter-shift intervals – the worker is the one who controls the shift.

RW is carried out at any distance from the place where its effects are expected or is carried out as part of a traditional employment system, using available information technology techniques¹⁹. The English term *home-office* has been generalized to describe this type of work that is done remotely and occasionally at the worker's home.

An aspect highlighted in the analysis of these work modalities is the ambiguity regarding their characteristics, with a list of advantages and disadvantages. There is also the role of the media in the effort to present this type of work as a kind of opportunity for personal freedom and autonomy ("you as the owner of your time"). Nevertheless, the perception of this depends on characteristics such as gender, family composition, and type of occupation, among others.

The pandemic brought a global reality with constant changes, requiring continuous adaptations. RW intensity in the pandemic increased significantly. Despite the absence of consolidated empirical evidences, occupational conditions in this scenario are peculiar. It is important to remember that these changes are introduced at a time marked by social distancing measures and with expected negative economic consequences, an unprecedented recession, economic decline, layoffs and rising unemployment. These factors, alone, can arouse fear and anxiety about the future and affect RW quality and people's lives. In the Brazilian context, there are also overlapping crises (economic, political, social and widespread lack of protection after labor and social security reforms) and restrictions on circulation and contacts, making RW one of the few possibilities for social relationships outside home. But the effects of these relationships depend on their role as a source of support or pressure.

What is the dimension of remote work in Brazil during the COVID-19 pandemic?

In order to control the COVID-19 pandemic, social distancing measures were adopted, with circulation restriction, and closing of offices, commercial establishment, schools and colleges. RW was the alternative found for the continuity of work activities. Administrative and school services were those with the greatest increase in this type of work. Studies in several parts of the world show this increase during the pandemic.

A study carried out in Poland²⁰ confirms the vertiginous increase in RW, coupled with the companies' and workers' unpreparedness for this type of work. Before the pandemic, remote workers corresponded to: up to 5 days, 1.9%; from 3 to 4 days, 4.0%; sporadically, 43.4%. Meanwhile, 33.9% have never done RW. The situation in the pandemic has changed radically: 85.6% workers carried out RW during 5 days/week. There are peculiarities in the profile of those involved in these activities: 69% were in the service sector; 73% worked in large companies, 13.5% in medium-sized companies, 9% in small-sized companies, and 4.5% in micro companies. In addition, there was a higher frequency of RW among women (58%) and parents with children under 18 years of age (61%).

In the United States, a survey conducted in April 2020 with 25,000 workers found that almost half of them were working from home (48.7%): 34.1% started working during the pandemic, and 14.6% had previously worked at a distance²¹.

In Brazil, data from PNAD COVID-19, from May 2020¹¹, show a very precarious general context: among employed persons who were away from work (considering the reference week: 19.0 million), approximately 9.7 million had no pay – representing 51.1% of people not working, or 11.5% of the total employed. The Northeast and North regions had the highest percentage of people away from work and without pay: 55.3% and 53.2%, respectively. This is a scenario that exerts intense pressure on those who kept their job and salary. The threat of unemployment emerges as a greater evil in current tensions.

Of the total number of employed persons in Brazil, in May 2020 (84.4 million), 77.5% (65.4 million) were not away from work; among these, 13.3% (8.7 million) were working remotely (home-office). The percentage of women doing RW was 17.9%, higher than that registered for men (10.3%); there were no major disparities by age group (14-29 years: 11.7%; 30-49 years of age: 14.4%; 50-59 years of age: 12.0%;

60 years of age or older: 14.3%). Per schooling, the higher the level of education, the higher the percentage in RW: 0.6% among people with no education, with complete or incomplete elementary school; 1.7% among those with incomplete secondary education. Among those with complete high school and/or incomplete higher education, the percentage was 7.9%; with a college degree and/or a graduate degree, it was 38.3%²².

PNAD COVID-19 data, from July 2020²³, (about five months of pandemic), confirm this RW profile, in addition to showing regional, social and occupational inequalities. The proportion of employed in RW suffered a slow decline: 13.3% in May average to 12.4% in June; 11.7% in July; 11.5% in August (remaining stable in the last three weeks of August). The distribution according to level of education remains as mentioned above, the higher the level of education, the greater the proportion of people in RW. The most qualified occupations were also those with a higher proportion of RW: science and intellectual professionals represented 50% in RW, while for elementary (unqualified) workers and installation and machine operators and assemblers, the proportions corresponded to 0.9% and 0.4%. respectively (Table 1). Regional differences also persist, with wealthier regions having higher proportions of workers in these activities: in the Southeastern region they represent 13%, and in the North, 4% (**Table 2**).

With regard to the disparities, the PNAD COVID-19 data²³ still present two aspects. The first refers to the differentials of Internet access and quality in richer regions and the predominance of informal work in poorer regions. In the second quarter of 2020, in the Southeast region informal work corresponded to 31.5%, while in the North region it reached 57.9% of the employed population¹¹. Informal activities include activities with a low use of technology (necessary for working from home) and provision of face-to-face services, such as agriculture, domestic work and informal street trading activities. This can help explain the differences in RW in Brazilian regions: the lower the level of qualification and the more precarious the work, the lower the implementation and the more reduced the use of RW. The second aspect refers to a higher proportion of RW in occupations traditionally pursued by women (education, science and administrative support), which reinforces social configurations that affirm greater compatibility of the private space with women's work and allow adjustments to domestic and family assignments. In other words, they reinforce traditional characteristics of the sexual division of labor and its valorization and social recognition.

Table 1 Estimates of employed population* and in remote work** during the COVID-19 pandemic, according to occupation, Brazil, 2020

Occupation	Employed population (%)	In remote work (%)
Science and intellectual professionals	13.1	50.0
Administrative support workers	7.0	10.6
Mid-level technicians and professionals	6.3	9.0
Directors and managers	3.5	8.0
Service workers, trade and markets sellers	16.6	5.4
Skilled workers, construction workers and workers in the mechanical arts and other professions	12.5	1.2
Elementary workers (unskilled)	14.0	0.9
Installation and machine operators and assemblers	7.9	0.4
Skilled agricultural, forestry, hunting and fishing workers	6.6	0.2
Others	12.5	14.3
Total	100.0	100.0

^{*}Employed population N = 84.4 million; **Workers in remote work: N = 8.7 million. Source: IBGE, PNAD COVID-19, may 2020¹¹

Table 2 Presence of remote work, in the context of the COVID-19 pandemic, in each region of Brazil (2020)

Country regions	Employed population (million)	In remote work (%)*
Southeast	36.7	13.0
South	13.5	9.0
Center-West	7.0	9.0
Northeast	17.9	7.8
North	6.2	4.0

Percentage estimate (%) considering the total number of employed persons and not away from work in each region. Source: IBGE, PNAD COVID-19, may 2020¹¹

Remote work features

In the recent literature^{20,24-33}, the discussion focuses on surveying the advantages (positive aspects) and disadvantages (negative aspects) of teleworking or remote activities (home-office), with emphasis on the positive points (Table 3). Positivity seems to be associated with three aspects: a) most research examines the effectiveness and impact of RW on organizational performance, but it does not incorporate or examine the worker's perspective; b) neglect of gender issues - rarely mentioned or analyzed; c) focus on the economic perspective: in the face of the pandemic situation and the associated financial crisis, the worker is between unemployment, remote work and in-person work with risk of exposure to the virus. In this context of crisis, the possibility of opting for RW exudes an air of privilege. Nevertheless, based on the clues that can be gathered so far, in practice, the reality is far from that.

A closer look at the implementation of this type of work and the existing conditions for it to be carried out shows that, at the same time that it created a situation protected against COVID-19, it also led to demands and requests, in unregulated

working conditions, with the potential to increase occupational risks and the occurrence of illness, such as RSI/WRMSD and work-related mental disorders. This is aggravated by the responsibility, assigned to workers, for providing working conditions and safe situations for professional practice.

The characteristics of this new work configuration (Table 3), marked by the abrupt invasion of the domestic and family space by professional work, are experienced in different ways, depending on the circumstances experienced in the productive and reproductive sphere. Experiencing it is linked to the perspectives and possibilities of each social and occupational group and to the available resources and access. As pointed out, several factors can hinder RW to be carried out, such as the presence of small children, elderly or sick people at home; inadequate spatial and furniture structures (location, equipment, Internet); absence of previous experience in using necessary technologies²⁰. These conditions, in turn, are determined by the dominant access or exclusion in the social structure established. The bits of information available so far warns about the possibility of deepening inequalities in class, gender, generation and race/skin color in the world of work due to the implementation of remote activities.

 Table 3
 Positive and negative aspects of remote work in the context of the COVID-19 pandemic (2020)

References	Positive aspects	
Alon, Doepke, Olmstead-Rumsey and Tertilt ²⁴ Himawan, Fanggidae and Helmi ²⁵ Mungkasa ²⁷ Wolor et al. ²⁸	It allows managing work with flexibly and can contribute to a better balance between professional work and family life.	
Kaushik e Guleria ²⁶ Mungkasa ²⁷	It reduces commuting time, environmental pollution due to the use of fossil fuels, and contributes to saving fuel.	
Kaushik e Guleria ²⁶ Mungkasa ²⁷	It makes work more flexible: work can be done where, when and how worker prefers.	
Kaushik e Guleria ²⁶	It allows workers who suffer from social anxiety to be socially distant.	
Kaushik e Guleria ²⁶	It increases productivity.	
	Negative aspects	
Mungkasa ²⁷ Putro and Riyanto ²⁹	Absence of direct contact with co-workers and exclusion from social situations (coffee, small meetings, casual conversations), recognized for reducing worry and improving performance.	
Dolot ²⁰ Putro and Riyanto ²⁹ Gondim and Borges ³⁰	Feeling of isolation, loneliness and alienation; absence of social support and help at work; frustration and feelings of professional isolation.	
Dolot ²⁰ Mungkasa ²⁷	Impact on relations with neighbors and family members due to social stigmatization: those who stay at home are seen as being unemployed.	
Mungkasa ²⁷	Increased domestic conflicts when workers do not help at home and do not participate in family activities, despite being at home.	
Dolot ²⁰ Himawan et al. ²⁵ Wolor et al. ²⁸ Putro and Riyanto ²⁹ Cho ³¹	Loss of boundaries between work and personal life. Impacts on the use of time, routines of paid and domestic work and other activities pursued at home (sleep, rest, leisure, self-care).	
Dolot ²⁰ Mungkasa ²⁷ Wolor et al. ²⁸	Loss of control over the workday, causing the feeling of being at work all the times absence of breaks, night work and work on weekends.	
Mungkasa ²⁷ Wolor et al. ²⁸ Gondim and Borges ³⁰	Technical and structural inadequacies that are passed on for the worker to solve, since the activities and tasks were not designed to be carried out remotely.	
Dolot ²⁰ Mungkasa ²⁷ Gondim and Borges ³⁰ Himawan et al. ³² Lord ³³	Difficulty concentrating due to the presence and demands of other family members. Family spaces are not adapted, nor are they suitable for professional work.	
$Lord^{33}$	It may contribute to the increasing precariousness of work, shifting the cost of the workspace from employers to employees.	
Himawan et al. ²⁵ Mungkasa ²⁷ .ord ³³	Increasing household costs with electricity, water, Internet, food and the purchase of computers, monitors, Internet provider contracting, which are added to the featof losing advantages such as transportation vouchers and food aid.	
Dolot ²⁰ Himawan et al. ²⁵ Volor et al. ²⁸ Gondim and Borges ³⁰	Use of inappropriate furniture can favor inappropriate postures and worse ergonomic conditions that, associated with the absence of breaks and long workdays, can lead to pain and musculoskeletal disorders.	
Dolot ²⁰	It reduces the home comfort (which is no longer just a domestic space), restricting the possibilities of relaxation, leisure and rest.	

With regard to gender, the absence of time and space boundaries between functions is likely to be even more disturbing for those who are responsible for family demands³¹. Therefore, RW may be more harmful to women²⁴, especially for those with young children^{20,34} and those who are single mothers²⁴. Empirical studies corroborate this hypothesis. Among workers in Belgium, those who had children at home were less satisfied with RW³⁴; in Poland, 82% of mothers of young children indicated having difficulties with RW²⁰.

Consequently, it is credible that RW, in this context, adds disproportionate burdens to women³⁵ and widens gender inequalities inside and outside the formal labor market, reinforcing sexual distinctions in the insertion of work, in precariousness and in social and economic valuation, since the lack of institutional support policy during the pandemic perpetuates and privileges an "ideal" male worker³⁶.

Remote work and gender differentials in the pandemic context

Although the possibility of combining professional work and family activities is one of the items most cited as RW advantages, this theme approach almost never included analysis of aspects related to gender, race, or social class²⁶⁻²⁸. When women are mentioned, the positive perspective of reconciling professional and domestic work is reinforced: as both start to occupy the same space, both functions can be performed at the same time^{25,33}.

However, the proper assessment of the RW impacts should consider that: 1) worldwide, women are primarily responsible for domestic work, which already made it difficult for them to enter the labor market or to reconcile these two functions; 2) the reconciliation between family and professional work is particularly affected during the pandemic, whether by closing of schools and day care centers, suspension of activities of professional caregivers (day laborers, domestic workers and babysitters) or by leading them to being apart from relatives, friends and/or neighbors who helped as informal caregivers^{24,26}. Unsurprisingly, this extra domestic work produced by the pandemic fell on women, exacerbating gender inequalities in the division of domestic work within families³⁶. In addition, 3) it is likely that more women will face job loss, either due to the expected job reduction in the service sector, which is predominantly female (education, food, hospitality, trade activities), or because of the need for one spouse to stop working to take on extra domestic activities²⁴.

As a result, substantive differences in RW for men and women can result in a greater unbalanced conflict between work and family. The increase in demands for child care, including teaching activities, with little space for alternative arrangements and social support, has a great impact on women^{24,37} and amplifies the already existing work-family conflicts. In addition, there is an increased need for domestic activities during the pandemic, since more people are sick and need care, and continuous cleaning is necessary, not only of the home environment, but of everything that comes home (food and packaging, for example).

Evidence from studies on time used for paid and unpaid activities before the COVID-19 pandemic shows significant gender disparities: in 2013, in almost all Latin American countries, women had the highest average total work (formal and domestic) hours, with data that reveal twice, or more, that time for women, reaching triple in Mexico and quadruple in Colombia, Ecuador and Peru. This is a reflection of domestic work, done almost exclusively by women. despite their growing participation in the formal labor market³⁸. Due to this previous unfavorable context for women, it is worth asking whether, with the change from work to home, this distribution of work in the family has been altered, becoming more equitable or causing new conflicts in the negotiation of boundaries between work and family.

During the COVID-19 pandemic, a greater proportion of mothers than fathers declared difficulties in RW due to the need to care for children¹⁹. Studies, although initial, reiterate the expansion of the unequal division of domestic work per gender.

The overlap/conflict of professional and family functions, associated with increased demands and lack of support, add and intensify stressors and psychosocial risks^{28,30}, which can cause psychological distress and mental disorders²⁹. There is evidence of an association between work-family conflict and alcohol abuse, exhaustion, anxiety, depression, sleep and eating disorders³⁹.

Another point that deserves reflection is the repercussions of family and occupational tensions (which now get mixed up) and the psychological consequences for the occurrence of intra-family violence. RW associated with social distancing measures enlarges the time spent at home, and it is related to increased domestic violence during the pandemic⁴⁰, with emphasis on that caused by the intimate partner. This is a global trend, with several countries presenting more reports of domestic violence⁴¹. In Brazil, a survey carried out by the Brazilian Forum on Public Safety⁴² indicates that the Military Police of the State of São Paulo registered

an increase of 44.9% in women victims of violence and 46.2% in cases of femicide. These data confirm reports in the literature on the intensification of domestic violence during disasters and crises³⁵.

The impact of RW on the evolution of professional careers is another relevant aspect. With paid and domestic work occupying the same environment, its limits are blurred and, if women continue to engage in an even greater share of domestic and family tasks, these changes are likely to affect the work and professional results in a different manner³¹. Reduced productivity among women can have an impact on their current and future careers⁴³.

An example of this has been described in scientific performance and production. Initial data show an increase in gender disparities in RW activities. As described in **Table 1**, science and intellectual professionals recorded the highest proportion of RW. These positions present a significant percentage of women (activities at universities). It seems that the distinctions of entry into and recognition in academic life, already identified between men and women⁴⁴. have been added to the reduction of academic productivity in the RW situation. Data show that COVID-19 greatly affects the researchers' publication. Reading, text analysis, data collection and treatment, writing and correcting scientific articles activities require lasting concentration, which is difficult in situations of overlap between productive and domestic activities in the same space⁴⁵. The reduction in scientific production, with a decrease in the number of articles produced by the researchers, confirms the problem and strengthens the urgency of its confrontation. Anderson et al.⁴⁶ analyzed 1,893 medical articles related to the pandemic, compared to articles published in the same journals in 2019, and concluded that the proportion of articles by women first authors was 19% lower than for articles published in the same journals in 2019.

Final considerations: reflections on critical aspects and perspectives

As explored above, the gender dimensions in the health crisis generated by the COVID-19 pandemic also apply "within" home, where the unequal division of domestic work per gender persists. COVID-19 exposes how the usual functioning of the labor market is linked to gender roles to demand more work from women than from men.

Despite the critical points highlighted, the current moment may favor the debate on the need for policies that rethink the bases of society's responsibility for domestic work. This can help in seeking socialization mechanisms for this work. Public policies in this direction are essential. Guidelines for these actions should emphasize at least two directions. The first should focus on reorganizing domestic work based on the equal division of responsibilities between men and women; the second includes the socialization of these activities through social support devices and equipment in the community.

Incorporation of skills into the training and teaching process since early childhood education can be used as a public policy for the reorganization of this work. Basic self-care actions (such as cleaning the house, washing clothes and cooking) should be incorporated into education and reinforced throughout the school trajectory, based on the idea that care activities, which allow the basic needs of life to be met, are "girl" and "boy" tasks and represent skills to be developed in the search for autonomy and personal independence. Several countries in Northern Europe maintain subjects with this format in compulsory school curricula.

The other crucial aspect in public actions and policies refers to the role of the State in offering and/or encouraging the structuring of accessible equipment for the domestic work socialization. Even considering the current social distancing measures, the relevance of spaces such as day care centers, laundries and popular restaurants is emphasized as essential elements in this process and, although they are alternatives that may not be in operation at the time of the pandemic, they are fundamental measures for a definitive future solution of the problem. Public policies must guarantee or encourage the offer of these spaces to all communities, especially those with social vulnerabilities. In general, in capitalist societies, especially in contexts such as the Brazilian, only productive labor (of goods and products) is understood as liable to be socially divided. Despite the central role of domestic work in social reproduction, it remains confined to the private sphere – as each family's responsibility. Thus, movements towards domestic work socialization are crucial to resize life and reduce inequalities.

There is a prospect that the COVID-19 pandemic will affect the frequency of RW^{20,21}. With the pandemic, in Brazil, RW started to be adopted in occupations in which this type of work did not exist, such as elementary school. Thus, even in the absence of empirical data, it is possible to suppose that the experiences forced at this first moment become programmed activities later, incorporated into many positions, in partial or integral workdays. The studies show a certain initial adherence to this proposal for RW. For example, in Poland, 40% of respondents stated that they wish to stay with

this type of work for 1-2 days a week, while only 5.5% would not like to keep on doing RW after the pandemic²⁰. Monitoring of this adherence will make it possible to observe whether it will be persistent.

The flexibility proclaimed by RW in general comes with the cost of the absence of temporal and spatial limits between professional work and domestic and family tasks. The most prominent element is the beneficial character of RW in reconciling these activities. But this analysis, as discussed, has been produced without addressing the differentials related to the sexual division of labor in societies. The situation of the pandemic and the economic crisis associated with it are also not analyzed. Ethnic and racial and class characteristics are not analyzed or known.

Given the tendency to expand RW, it is then necessary to discuss on what basis this will happen. There are elements that point to the possibility that working from home contributes to increasing precarious work. The transition to RW has generated additional costs for workers (computers and monitors purchase, Internet providers and telecommunications systems contracting) and has demanded specific space at home where they can work in peace for long periods of time - which is impossible for a significant part of the working population with their small houses, tiny and shared apartments. Will this become another marker of exclusion from the labor market? Will RW be our teleworking anteroom (this flexible work, by task, incorporated by the Brazilian labor reform)?

Regarding time management, the situation will require a set of measures to regulate and adjust work from home and should involve investments in technical training and skills development for new demands and redesign of activities for the workday new model and rules. It is important to stress that these limits cannot depend only on worker-employer regulation. The State has a central role in this regulation, with public employment and labor protection policies. In any case, there are enormous limits for the regulation of work in the home private space.

There are still more questions than answers. What seems salutary, however, is that measures must be taken to anticipate these changes and create structures that maximize the potential benefits of RW and protect male and female workers' health. The correlation of forces in Brazil, at this moment, has not been favorable to workers, with a wide dismantling of labor protection⁴⁷. Therefore, this is yet another struggle field that appears.

Finally, it is worth noting that keeping life and physical and mental health is a collective task. It is in the capacity for social cohesion that it is possible to find the possibility of reshaping contexts and their processes in order to reduce inequalities. The actions of unions, associations, collectives and communities must be motivated and strengthened. The project of an egalitarian and democratic or exclusionary and authoritarian Brazilian society is in dispute, and it is necessary to decide, individually and collectively, where the efforts will be invested and in which direction our movements should go. It is a present time decision.

Authors' contributions

The authors contributed in the same proportion to the planning, development, critical review and approval of the final published version and assume full responsibility for the work carried out and the published content.

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