Work, telework, and mental health during COVID-19

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> Abstract This review addresses the impact of the COVID-19 pandemic on workers' mental health, in particular, teleworking conditions. Our analysis is based on documents from several international organizations and specialized scientific publications. The retrieved information reveals that the pandemic has had a significant effect on the mental health of frontline workers and employees who had to migrate to a virtual environment without prior warning. However, a positive aspect is reflected in the development of several remote mental health care devices implemented to protect vulnerable population, frontline workers, and the general population. Finally, this paper underscores the importance of developing public policies for protecting workers' mental health. Key words Telework, Work, Mental health, CO-VID-19, Public health

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Introduction

Daily practices of people have been observed during the COVID-19 pandemic, including working conditions, which have implied, in many cases, radical change, adaptation, disintegration and loss. Although teleworking is not new, the pandemic has accelerated the remote work process in several sectors and imposed new conditions¹⁻⁵. For example, the poor working conditions and the lack of privacy due to the improvised new virtual environment caused by the sudden measures to restrict public movement adopted during the pandemic forced many people to perform their job duties remotely. Several studies have provided empirical data on the implications of the new remote employment conditions on the health of workers and their daily social and professional environment, and family interactions⁶⁻¹⁰.

However, we should differentiate teleworking before the pandemic and during the health contingency, which was abrupt and without much prior organization in several Latin American and Caribbean countries¹¹. Even though teleworking does not necessarily imply that activities are carried out from one's home, the "Stay home" advice was given repeatedly during the pandemic. Next, from an analysis of the specialized literature, we reflect on the impact of the pandemic on teleworking, the working conditions of frontline staff, the reports of the International Labor Organization (OTI) and the World Organization for Health (WHO), and the long-term effects of COVID-19 on the mental health of employees, whether face-to-face or remote¹²⁻¹⁷.

This is a review of the scientific literature available at the time of its preparation (April 2022), where the consequences of the COVID-19 pandemic were still being witnessed and remote and face-to-face employment conditions were under different work environments. Thus, some key documents that were widely disseminated at that time together with more recent references allow the contextualization of the event. Overall, we aim to reflect on employees' working conditions and mental health in the context of COVID-19, where the novelty was not strictly located in the virtualized job performance but in the constraints imposed by the pandemic for teleworking.

Work environments during the pandemic

As is known, the work environment is one of the leading indicators considered in the burden of employees' physical and psychological diseases, essentially due to the structural and organizational conditions in which the activities are performed¹⁸. Although the pandemic generated the transfer of many face-to-face workplace contexts to teleworking, not all employees agreed to the same conditions. Some studies have emphasized the socio-labor segmentation among the various workers who transitioned to teleworking, showing that these individuals are primarily those with a higher educational level, are self-employed, have high professional qualifications, and hold non-manual occupations.

Some authors have observed that poor working conditions are also displayed in the context of teleworking and its different social segments¹⁹. In addition, it has been stressed that adopting a teleworking environment does not necessarily guarantee job satisfaction. Even though many workers find advantages to adopting telework, remote employees may also experience a number of negative repercussions on their mental health^{9,10,20}.

Of course, the pandemic posed a context of health risk for frontline employees who continued to work in their usual settings, often due to job overload or substandard conditions to perform job duties without adequate health safety. Among the frontline workers who had to face the pandemic in their daily places of employment due to the essential role of their functions are health professionals, health care providers, food distributors, public and private security personnel (caregivers, police, and military personnel), informal workers, and journalists²¹⁻²⁷. Several studies have documented the impact of the pandemic on the mental health of these employees and, in many cases, remote emotional care and psychosocial support services have been successfully implemented in work settings.

One of the pandemic's positive aspects was noted in the expanded remote mental health care through telepsychology, telemedicine, e-mental health, and the development of different virtual devices for the psychological containment of vulnerable and frontline population²⁸⁻³⁰. However, it is unclear how these services will operate in a post-pandemic setting due to their potential effects on accommodating the specific demands for mental health care from employees as well as the implementation of future policies that need to be structured and strengthened. A focus of future training, awareness, and self-care regulations should be on the first responders, particularly health personnel, who experienced significant job pressure and improper social stigma because of their public function³¹⁻³².

ILO reports

The ILO has published several essential reports to contextualize work overview during the pandemic¹² and the influence of teleworking on mental health¹³. On the one hand, the report on employment prospects could have been more encouraging since a return to pre-COVID-19 working conditions was not foreseen for 2022¹². The situation imposed by the pandemic generated more significant difficulties in establishing decent employment conditions. Logically, reduced working hours or job losses have decreased households' income. The ILO argues that the Americas were the most affected, particularly in low- and middle-income countries, where the number of working hours was considerably reduced¹⁵. This situation has become more complex for the sustenance of households due to higher prices on primary products and essential goods. Many homes already had this situation, but the survival and vulnerability conditions worsened during the pandemic.

According to the ILO report, the pandemic has also had a significant impact on young people's jobs because the implemented health measures had specific consequences on this population by disrupting training and educational programs, leaving them with no prospects for the future and driving up the rate of psychological disorders ¹⁵. Likewise, it is recognized that the pandemic has affected inequality in female employment, which is estimated to recover in a few years. The pandemic hard-hit women. Many had to take on family demands, and female healthcare workers, who represent 70% of the workforce in that sector, had to work beyond their capacities in the face of pandemic. The lack of social equality in having access to technological resources during the pandemic was another factor that had an impact on job occupations and households' finances. All these circumstances, some structural and others exacerbated by the pandemic, should contextualize the analysis of the impact of working conditions on people's mental health. A public call has been made to promote a people-centered recovery with inclusion, sustainability, and resilience¹⁴.

Nevertheless, the ILO has indicated that Europe recorded an increase in teleworking from

11% to 48% due to the pandemic. This hike was generally associated with workers with higher incomes and educational levels13. However, it was a confusing transition involving subjective, ergonomic, and psychosocial adjustments for many people. In this instance, the relevance of making recommendation guides and specific training for teleworking has been pointed out. Although positive telework aspects have been highlighted, different risks to teleworkers' physical and mental health have also been evaluated. Among them are the extended working hours, the rhythm and intensity of activities, cyberbullying, violence, isolation, stress, depression, and imbalances between work and personal life. The lack of privacy and desirable working conditions affect job performance and strain family relationships daily. These issues establish responsibilities for employers (who must provide a healthy teleworking environment), workers (who must comply with regulations), and monitoring government agencies (who implement policies to control and manage work-associated risks).

COVID-19 long-term impacts on workers' health

The illness brought on by SARS-CoV-2 virus infection (COVID-19) not only adversely affected people's health³³ but also showed various symptoms that persisted for weeks or even months following the acute phase of the illness, impeding the anticipated improvement in health conditions. Although several terms have been proposed to name the long-term effects as a cause of COVID-19, the WHO proposed the term "post-COVID-19 syndrome", which consists of an affectation that can emerge from the onset of the disease and continue for three months, with several symptoms lasting at least two more months and another diagnosis³⁴ that cannot explain that. The most common persistent symptoms include fatigue, shortness of breath, and neurocognitive dysfunction. Nevertheless, because the affectation is typically extremely varied among patients, many additional symptoms (such as muscle aches, difficulties concentrating, and memory loss) might also appear³⁵⁻³⁹.

The problem of this new affectation lies in the complexities it entails for people performing their daily activities and the expected performance of daily functions, including work, whether face-to-face or remote, due to physical and psychological difficulties. According to several studies, COVID-19's long-term effects have a direct impact on return-to-work efforts and employees who frequently endured job losses³⁹⁻⁴¹. The COVID-19-derived long-term effect has a significant negative influence on people's quality of life. It is a warning sign for the households' financial stability and public healthcare system, and therefore it has been suggested for several specialized care programs be implemented, and public policies be developed with appropriate funding42.

A study on Italian workers revealed that fatigue, tiredness, and weakness made up a triad of persistent symptoms after COVID-19 infection⁴³. This same study also pointed out essential repercussions of constant symptoms on the mental health of these workers, such as stress, depression, anxiety, and sleep disorders. Still, research highlighted how challenging it is to distinguish between persistent symptoms caused by COVID-19 and those brought on by a person's environment or place of employment. Another study indicated that fatigue and cognitive problems were the most noticeable long-lasting effects in a group of Spanish employees, which affected the population's ability to function at work; 80% of the participants in this study missed work due to symptoms resulting from the COVID-19 and their mean duration of sick leave was 12 months44.

According to the study of social service employees in Germany, over 73% of them experienced symptoms that persisted for longer than three months. These symptoms included fatigue, difficulties with concentration, respiratory problems, and a poor quality of life. More than half of the population analyzed in an Italian study of healthcare professionals (56.3%) displayed persistent symptoms, the most common of which was fatigue (32.1%), followed by musculoskeletal pain (13.6%) and dyspnea (13.2%); these symptoms restricted the employees' working conditions⁴⁶. According to a study of the general population in several nations, more than 54.6% of people reported long periods of being unable to work; 34.5% of people reported losing their jobs due to illness; 63.9% reported having trouble coping with daily tasks; and 17.6% reported having financial difficulties as a result of the disease. The severity of the symptoms increased the impact of these repercussions⁴¹.

The identification, approach, and treatment of the post-COVID-19 syndrome in the workplace have been the subject of some proposed approaches to monitor and intervene. For instance, the significance of establishing health promotion

programs has been emphasized, where information on the post-COVID-19 syndrome is available for staff members to inform about its effects and encourage them to seek expert care. Monitoring employees' health in the workplace has been indicated, along with the organization's and employers' assistance. Some rehabilitation and remodeling strategies of work environments have been proposed, reducing the working hours, and actions to strengthen physical and recreational activities have also been suggested for those employees affected by persistent symptoms. Several instruments and measurement scales can be used to evaluate and monitor physical and psychological symptoms, some specifically developed to assess health in COVID-1948. Teleworking has also been indicated as an alternative for gradually returning to daily work activities⁴⁹.

Ultimately, a few recently published studies have underscored the importance of in-depth research on the long-term effects of COVID-19 since numerous knowledge gaps have been detected on this affectation⁵⁰. In order to do so, the necessity for research on the working population was highlighted, as the majority of reports come from studies of the general population and there aren't many specialized studies in the field of labor ⁵¹. The need for more detailed information for the Latin American population, where COVID-19 has significantly affected labor activity as indicated by the ILO report 15, has also prompted the necessity for further research^{52-53.} This requires particular attention since the lack of specialized information on this health issue can lead to inequality and hinder the ability of the most afflicted households and society to recover economically.

WHO guidelines on mental health at work

In keeping with the impact of the pandemic on mental health, the WHO prepared a document with guidelines on mental health at work, which sets out some specific recommendations for work environments¹⁶. Six levels of intervention are proposed. In the initial phase, the WHO recommends participative organizational initiatives that address psychosocial risks in order to reduce workers' emotional distress and enhance their performance. Interventions for improving workplace communication and reducing workload are also suggested, especially for personnel working in the medical, humanitarian, and emergency sectors. The development of organizational interventions is important to achieve adaptations

for employees with mental health issues. Secondly, the WHO recommends training mental health managers who will develop actions to support the mental health of their workers and achieve a better understanding of mental health issues and thus guide workers in searching for psychological help. Thirdly, it proposes to conduct training actions for workers in the mental health field to achieve awareness of the issues inherent to this problem, improve their knowledge about mental health, and eradicate stigmatizing attitudes. Furthermore, the WHO recommends developing universal individual interventions, some specific to health, humanitarian, and emergency staff, and others for workers with emotional distress. At this level, it proposes psychosocial interventions that offer the possibility of developing skills for stress management and the promotion of positive mental health, with the indication of physical activities, aerobic training and resistance, leisure, and yoga, or even applications based on the cognitive behavioral approach to reduce discomfort and improve work activity. The next step proposes specific actions to consider an adequate return of workers after an absence due to mental health problems, where special attention to the work tasks to be performed is combined with clinical mental health care based on the evidence. Lastly, it recommends developing strategies aimed at the recovery and inclusion of workers living with severe mental health problems.

Overall, the WHO document attempts to offer course of action to address issues and problems related to mental health at work since it is based on the idea that work not only provides a context for the deterioration of mental health but also is a protective factor for people's psychological wellness. Therefore, it is important to ensure a safe and healthy working environment, avoid employees' mental health issues, and promote and safeguard mental health at work. As a result, combined actions are required from public policies, organizations, employers, unions, health service planners, civil society, and the employees themselves⁷.

Conclusion

The pandemic has provided a significant laboratory context for different trials and tests, some based on scientific knowledge and others more improvised as a result of the impending needs, which has meant a great experience for all areas of daily life, particularly for the disciplines that cover problems related to work and mental health. Therefore, we should emphasize the inclusion and promotion of mental health in public policies in the following setting of the COVID-19 post-pandemic, especially considering the significant impact of the post-COVID-19 syndrome on the mental health of the face-to-face and remote working population.

It is relevant to monitor and address the effects on mental health and establish safeguarding actions. In particular, preventing mental health issues in employees should start by providing healthier working environments, adapted to specific tasks, and with adequate socio-environmental conditions, safety, hygiene, and lower risks to physical and psychological health. This becomes pertinent to adapt to the new virtual work environments and the specific conditions of frontline workers. Similar to how it is for everyone in the workforce, the education and training of these professionals should include academic content on the topics of mental health care and self-care for medical and first-aid personnel during a pandemic.

One of the pandemic's beneficial outcomes was expanding remote mental health care services for the general and vulnerable population and for frontline workers in different sectors. Although, the challenge remains regarding how remote mental health services will continue in the new post-pandemic private and public settings. The evaluation conducted so far has been quite positive. However, it is still necessary to conduct an in-depth evaluation of the different virtual psychological practice that have been implemented to ensure that the acquired diagnosis serves as a foundation to develop theoretically sound virtual mental healthcare strategies. M Gallegos: conception and design or analysis and interpretation of data, drafting of the article or its critical review, and approval of the version to be published. P Martino, V Quiroga, C Bonantini and A Razumovskiy: analysis and interpretation of data, drafting of the article or its critical review, and approval of the version to be published. WLA Gallegos and M Cervigni: drafting of the article or its critical review and approval of the version to be published.

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