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# Challenges of Post-Pandemic Teleworking to Promote Adequate Conditions and Prevention of WRMSD

Mini review

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# Abstract

Teleworking has been a form of work that has growth worldwide, especially during COVID-19 pandemics. Benefits mainly related to greater flexibility and work management, reduced mobility and costs are highlighted by workers and enterprises. On the other hand, working conditions are not always the best in the home environment. Workers faced increased working hours, some conflicts between work and personal life, and new [and old] working occupational risks emerged. In this scenario, some physical and mental illness, and interpersonal and marital relationships, become worsened. After the pandemic, telework was maintained, extended, and sometimes started by new workers, that brings challenges for workers, managers, companies, and the society. How to deal with this new working conditions to ensure the need of occupational health risk prevention?

Keywords: Telework, Office work, Working Conditions, Musculoskeletal Pain, Occupational Health, Workplace Condition

# Introduction

Teleworking is a type of work resulting from advances in communication and information technologies [1], which has given many workers the flexibility to carry out their jobs in any space, including their home environment [2]. Despite these benefits, working conditions at home are not always adequate, such as the availability and quality of equipment, the workstation and furniture, the place used for professional practice, as well as the management of working time and household chores.

# Background

## WRMSD Risk Factors During Telework

Studies have reported risk factors associated with computer use and

physical discomfort, with a high risk of causing work-related musculoskeletal disorders- WRMSDs [3]. These disorders are caused or aggravated by working conditions without adequate ergonomics features, demanding repetition, long time periods assuming extreme postures, under organizational and psychosocial conflicts [4], that are constituting a public health issue [5], with significant costs in the European Union [6] and worldwide [7].

Therefore, WRMSDs are today one of the main causes of absence from work in the world [8]. A high prevalence of work-related musculoskeletal disorders was identified in teleworkers, highlighting also some individual risk factors as being female, high BMI [obesity], low education level, tobacco consuming, and other physical risk factors as temperature and illuminance, and workplace psychosocial risk factors as low support, collaboration, job control, and high job demands were



related with stress indicators and difficulty in managing work and family life [9].

## **Teleworking During the COVID-19 Pandemic**

There is a vast literature associating telework and WRMSDs during the pandemic [10,11]. Many workers were using household furniture and other furniture different from traditional office set up [12], in non-ergonomic workplaces [10]. Also, as risk factors for WRMSDs, increased number of hours working on the computer, absence or insufficient breaks during work [13] and difficulties in managing work and family life which leads to mental strain [14]. As a result of this process, the emergence or intensification of WRMSDs symptoms occurred [11,15] and workers were victims of their workplaces.

#### Telework and the Gender Relationship

Studies have pointed to the predominance of musculoskeletal pain in women who did teleworking [10]. Men expressed greater satisfaction with telework when compared to women, maybe because women accumulated domestic and childcare activities [16]. [17] reported that women received help from their partners during the pandemic, but the distribution of tasks still falls to a greater extent for women.

In this sense, telework occurs under different conditions for men and women, with women being at a disadvantage, as there is no balance in domestic and childcare tasks [18]. Questions were made about the real benefits of telework for women [16]. Traditional gender rules may difficult the working environment for women but the companies don't give attention to those situations.

#### Are all People Suited to Teleworking?

According to a study conducted by Tokey and Alam [19] there are significant differences in the interest or lack thereof in work activities that vary according to ethnicity, race, age, gender, income, forms of commuting/transportation, and presence of children. In the aforementioned study, the authors pointed out that young people and non-Hispanics are more likely to start teleworking or extend their teleworking hours. People who travel more frequently by public transportation are less willing to expand their teleworking. Nevertheless, they also identified that women, black people, those with a good income, and children under the age of five are more likely to contribute to the expansion of teleworking.

#### Teleworking after the COVID-19 Pandemic

After the pandemic, the question is what is the current teleworking scenario, given that many companies maintained teleworking jobs. In this sense, have companies and managers invested in improving the conditions for teleworking after the pandemic? Do companies are promoting ergonomics support for the teleworkers or other needs for support?

Hybrid models of telework gained prominence. A comparative study between in-person, hybrid and teleworking using the Healthy Workplaces Ecosystems Tool [EATS] identified that workers in a hybrid regime presented greater indicators for a more positive evaluation of the physical and psychosocial work environment, care and health actions, better emotional well-being and stress management [20].

The main question remains: in what working conditions are now the teleworkers, mainly at home? Does the Occupational Health Services provide the necessary support for teleworkers or are we dealing with unknown working conditions at teleworker home that may became a new WRMSDs pandemic in the future?

## Conclusions

Teleworking is a movement and irreversible process in the world as a whole, a result of modern society, the technological revolution, and the characteristics of the current times. Teleworking have advantages and disadvantages, but it is necessary to reflect on the strategies to be adopted to establish safe, healthy work relationships and, consequently, healthy workers and sustainable production. This includes thinking that companies and managers need to consider the working conditions including the workstation, furniture, environmental conditions and IT equipment at home to work, and all the specificities of work. Maybe home-work relationships, mainly due to household chores, and childcare, need to be better analysed allowing a new distribution of working hours and time flexibility to perform work safely. Hybrid work [on or two days in telework] seems to be more satisfactory for the workers, but home working conditions should be improved. Workspace, workplace conditions [temperature, ventilation, and lighting conditions], IT equipments, and environmental conditions must meet the demands of workers so as not to pose risks for musculoskeletal disorders. It is necessary to move towards in telework, ensuring a home ergonomics intervention allowing suitable workstations and adequate working conditions. The costs of working from home cannot be borne solely by teleworkers. Companies and the society need healthy workers, also at home.

## **Conflict of Interest**

The authors inform that there is no relevant conflict of interest for the content of this article.

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