

Teleworking and Its Effects on Health during the Covid-19 Pandemic

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Global health crises like COVID-19 are scary, destructive and confusing for everyone. Coronavirus (COVID-19) is a case of great concern worldwide. In addition to threatening people's health, it also affects their work. The truth is that the global outbreak of the virus revealed the fact that employers can respond quickly to these unexpected changes. Furthermore, it showed how organizations should be prepared to respond flexibly to these potential disruptions and reconsider the opportunity. The word telecommuting is heard a lot these days, and it is often used in the business environment. However, telecommuting has become very common in the country today due to the spread of the "COVID-19" or "Coronavirus" disease. Teleworking is expressed in a variety of terms: telework, homework, smart work, electronic work, and so on. The International Labor Office (ILO) defines telecommuting as "any employee who uses information and communication technology and works outside the main office at least once a month to perform related duties. Teleworking is any form of using information technology (such as telecommunications and computers) instead of

work-related travel and work-to-employee travel, rather than employee-to-work travel. Teleworking is not a job, but a way of organizing work that revolves around information processing. Individuals or groups of people, away from the employer, the customer, or the contracting party, do their job. This requires the use of various types of electronic equipment. Telecommuting is a way of working that allows the employee to perform his / her professional duties and tasks away from traditional bureaucracies. It is more flexible without having to be in the office, and one of the principles of its development in information technology. One-fifth of teleworkers are self-employed, and the rest are employees¹.

1. Telecommunication-related health disadvantages

Doing telecommuting, which requires the use of information technology (such as telecommunications and computers), can affect many indicators of people's health. Therefore, health problems related to telecommuting can be classified into two main categories: physical and psychosocial.

1.1. Physical problems

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As mentioned earlier, telecommuting jobs require the use of electronic technologies (cell phones, laptops, etc.). Working with these programs can affect the health of working people. It mainly causes musculoskeletal disorders as well as problems in the visual system. Neck / shoulder pain and low back pain, in general, have been reported as the main musculoskeletal symptoms. This problem can be solved by using the basic design of the workstation, increasing staff awareness and holding training programs on occupational health tips. Working remotely determines health, both by increasing physical inactivity and leading a sedentary lifestyle. In fact, they may have systemic diseases such as diabetes, cardiovascular disease (CVD), obesity and high blood pressure. Exposure to polluted air and high and low humidity can lead to symptoms of allergies in the eyes and airways (especially in people with lung disease), low job mobility, skin diseases, headaches, fatigue and poor sleep quality ².

1.2. Psychosocial problems

The main psychological problems associated with remote work experience are sleep disorders and work-related stress. Social isolation is another possible consequence of telecommuting.

Work-related stress (WRS) is a complex phenomenon which occurs when multiple psychosocial risk factors come together and interact. Psychosocial risks arise from interactions between labor content, labor organization, technological and environmental conditions, skills, resources and needs of workers. Factors affecting the perception of stress include: heavy workload, lack of decision-making independence, lack of support from colleagues or superiors, relationship conflicts in the workplace conflicts, paying little attention to their role in the company, and lack of participation in changes in the company. Some of these (heavy workload, low participation, paying little attention to one's responsibilities, lack of support) can be experienced by telecommuters, thus creating work-related stress.

Work-related stress can be caused by various events. For example, people might feel under pressure if demands of their job (such as hours or responsibilities) are greater than they can comfortably manage. Other sources of work-related stress include conflict with co-workers or bosses, constant change, and threats to job security, such as potential redundancy^{3,4}.

2. Telecommunication-related health advantages

Teleworking has many benefits, which is why almost 37% of the workforce had accepted it even before the current epidemic⁴. Academic research and a large body of data have long pointed to the main benefits of telecommuting, from increased productivity and work-life balance to reduced costs and wasted time. Telecommuting helps to improve traffic congestion, and thus, the environment. The authors also hope that the significant virtual transformation of organizations will improve their ability to measure employees' performance, clean up and refine administrative offices, and increase meritocracy and core talent in companies. Some of significant impacts of telecommuting include lower absenteeism levels, high levels of loyalty, increased productivity, flexibility, and cost-effectiveness among others. However, it also contains adverse impacts such as absence of workers from office, loss of synergy from the company and even lower control of the organizational data. Telecommuting is also expected to expand and grow as technology advances, and for years to come, it will still remain significant in organizations⁵.

To achieve a successful telecommuting experience, one must provide necessary infrastructures, the most important of which is organizational culture and the method of organizational management. Of course, we must pay attention to the negative consequences, one of which is the reduction of face-to-face relationships, and think of a suitable solution for it. It is very important to avoid overdoing it, which will have serious consequences. It should be noted that

telecommuting is not a definitive solution. This new model must go through its maturity cycle in organizations. The last point is that the telecommuting program will not be implemented with directives and instructions and even the creation of infrastructure. Unless the level of sensitivity and security of studies and data becomes transparent, no manager or official will be able to use this tool in their organization. Organizational culture and work environment play an important role in the level of telework satisfaction. To understand the role of teleworking in mental and physical health of individuals, we need to conduct more research on the factors that determine the satisfaction and well-being of teleworkers.

References

1. Bedford J, Enria D, Giesecke J, Heymann DL, Ihekweazu C, Kobinger G, et al. COVID-19: towards controlling of a pandemic. *Lancet*. 2020;395(10229):1015-8.
2. Lengen JC, Kordsmeyer AC, Rohwer E, Harth V, Mache S. [Social isolation among teleworkers in the context of the COVID-19 pandemic]. *Zentralbl Arbeitsmed Arbeitsschutz Ergon*. 2020:1-6.
3. Farin K, Bahram K. Psychological Effects of COVID-19 on Mental Health and Related Factors among Workers of a Beverage Industry in Tehran, Iran. *International Journal of Occupational Hygiene*. 2020;12(1).
4. Mojtahedzadeh N, Rohwer E, Lengen J, Harth V, Mache S. [Health-promoting work design for telework in the context of the COVID-19 pandemic]. *Zentralbl Arbeitsmed Arbeitsschutz Ergon*. 2021: 1-6.
5. Tavares F, Santos E, Diogo A, Ratten V. Teleworking in Portuguese communities during the COVID-19 Pandemic. *Journal of Enterprising Communities People and Places in the Global Economy*. 2020.