



THE RISE OF TELEWORKING AND ITS IMPACTS ON WORKERS' HEALTH

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Abstract

Approach to the advancement of teleworking, mainly due to the pandemic brought about by the new Coronavirus, where the consequences of this advancement, without proper planning, and without knowing for certain what will happen in terms of impacts on health, safety, well-being and quality of life workers, deserve special attention. Objective - To understand what teleworking is and what are the impacts on workers' health. Methods - Qualitative research, exploratory, with analytical-descriptive guidance, through bibliographic research from various sources in the "Preventionist World", which address the issue of teleworking. Results - Understand what are the possible risks brought by the sudden increase in telework, so that the preventive agents of the working world, both government, companies and workers, can develop preventive actions, to control the risks and reduce the impacts and their consequences on health, safety, well-being and quality of life for workers.

Keywords: Impacts. Teleworking. Workers.

1. INTRODUCTION

All of humanity, the world as a whole, is always in constant transformation. Nowadays, these transformations become more accelerated every day, and in the world of work it is no different, as these changes bring great transformations and impacts.

With the pandemic brought about by the new Coronavirus (COVID-19) at the end of 2019, several of these transformations were accelerated, and have already become a reality, such as work performed remotely, the so-called telework.

The so-called telework can be considered any work that can be performed outside the traditional work environment, using technology that allows it, since it does not require the physical presence of the worker in the company. Thus, telecommuting can be understood not only as work performed from home, but from anywhere the worker can carry out their activities, even through a smartphone, tablet, or laptop. The so-called Home office is actually a form of telecommuting, in which it is performed from home.

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Unfortunately, the speed of technological change exceeds the speed of updating the regulations necessary for the safe use of the new transformations in the world of work, and this can have serious consequences for the health of workers.

In a recent survey carried out by the Brazilian Federal Senate, it was found that, currently, about 21 million Brazilians have worked or work remotely. Of this total, about two-thirds say that the work in this modality was due to the social isolation caused by the pandemic of the new Coronavirus. This number corresponds to an estimated 14 million Brazilians (AGÊNCIA SENADO, 2020).¹ According to the results brought by this survey, telecommuting also brought benefits to personal life. The majority of remote workers have noticed an increase in the level of personal well-being (49%). For 23%, it remained the same, while another 26% pointed to a decrease in the level of well-being, because of teleworking. The survey also pointed out benefits for the family. For 48%, the family environment has improved. For 39%, nothing has changed. Only 12% answered that remote work worsened the family environment. The survey also shows some advantages reported by workers, such as greater productivity, flexible hours (28%), followed by having more time for family (24%). Not commuting to work (24%) and reducing expenses (12%) were also remembered. However, this same survey already points out some difficulties in this type of work, such as lack of quality internet (22%), followed by the difficulty of reconciling work with household chores (20%). The lack of adequate computer equipment (16%) and the absence of contact with co-workers (15%) were also mentioned as difficulties when starting remote work.

The consequences of these difficulties have a direct impact on the ergonomic issue, that is, on the postural issue and on the issue of mental illness of workers, due to this new form of work.

Many of these consequences are addressed in this research, because as this type of work was implemented abruptly for many workers, without adequate planning, the consequences for their health, especially mental health, will only be perceived in the medium and long term. This is the focus of this research, to try to understand this new way of working, so that preventionists can anticipate the problems that are emerging and will arise, proposing control measures right now.



2. GOAL

The main objective of this research is to understand how telework is being performed in Brazil and in the world, to discuss its impacts on workers' health, in order to highlight the problems caused by the implementation of telework.

3. METHOD

From published texts and specific scientific articles, a bibliographic search was carried out, in addition to other materials investigated on sites that deal with the subject, made available for research on the internet, enabling the basis of the proposed theme, being the current and purely qualitative research, not involving research on people or any disclosure of restricted or confidential data.

4. TELEWORKING

As already discussed, telework is a type of work performed from anywhere, not necessarily from home, and the worker is not physically present at the company's premises.

Telecommuting opens up great possibilities for flexibility and ease of virtual communication for the group, as pointed out in the survey carried out by the Senate Agency, but, on the other hand, it "destroys" the line between personal and professional life, making the worker a slave to the connection equipment, leading these workers and the company to confuse increased productivity with increased working hours.

To succeed in quality of life, it is essential to have a balance between personal and professional life, so that people achieve a state of well-being, becoming more productive people without affecting their health, safety, well-being and quality of life.

If, on the one hand, this type of work provides more freedom to the worker to better manage his time, on the other hand, it can generate non-conforming working conditions, because many places, many houses, for example, are not prepared, adequate for a worker to work his eight hours a day. Workers were sent to work remotely, due to the pandemic of the new Coronavirus, without time for planning, and many workers' homes do not have the necessary infrastructure for Telework, especially ergonomic structure, such as adequate furniture.

Some of the activities developed in companies are difficult to adapt to be carried out remotely, such as a production line, where there is a need for the presence of workers, but



others, such as order analysis, sales, customer visits, preparation of cost spreadsheets are perfectly adaptable to this new work model.

In this new scenario, there is a reduction in expenses, due to the non-need to pay for the employee's travel to the company, which is beneficial for the employer; It also brings advantages to the employee, who also benefits, as he no longer has to travel to work, with hours lost in traffic jams, especially in large urban centers, however, the issue of health and safety of the worker, especially his mental health, must be considered.

In Brazil, in 2017, according to the Ministry of Economy, Repetitive Strain Injuries (RSI) and/or Work-Related Musculoskeletal Disorders were responsible for the absence of 22,000 workers. (Brazil, 2019)²

The latest Statistical Yearbook of Social Security (AEPS, 2020)³, shows that, in 2018, 41,904 Accident Disease Grants were granted, related to diseases of the musculoskeletal system and connective tissue. This benefit is granted to Social Security insured workers who are temporarily unable to work for more than 15 days as a result of a work accident (INSS, 2017)⁴.

Society as a whole can benefit from teleworking, because, for example, by reducing the number of vehicles on the streets, pollution and noise caused by vehicles are also reduced, in addition to improving the already troubled traffic in large urban centers, improving urban mobility.

Telework is already a rapidly expanding reality, especially in already developed countries, however, its expansion must be better discussed and monitored, applying knowledge of health and safety at work, with workers being supported by the health and safety system, without suppression of labor rights, so that this new work relationship is not a new source of work-related illness.

5. TELEWORKING AND ITS CONSEQUENCES FOR THE WORLD OF WORK

Like any new form of work, there are advantages and disadvantages for the worker, and the consequences will only be known in a few years. In the case of telework, one of the problems that is beginning to be evidenced is that of overwork, where the worker is connected to work practically 24 hours a day, 7 days a week. The worker being always connected, being able to work from anywhere, caused widespread concern in France, which was forced to publish a law, called the Law of Disconnection (*le droit à la déconnexion*), which introduced the premise that companies with more than 50 workers must negotiate with unions as a way to define better



times when workers can disconnect from work, That is, they can ignore messages sent by the company, usually outside normal working hours, such as weekends and holidays, without them being punished for it. (OCCUPATIONAL HEALTH, 2017)5.

In Germany, Volkswagen itself, since 2011, has already imposed some restrictions on access to your email between 6:15 pm and 7:00 am. (EXAME, 2014)6.

As many companies had not yet implemented the telework system, they had to do so abruptly, and few guidelines for this implementation are found in the literature. With this in mind, the Brazilian Association of Business Communication – ABERJE, published 8 themes, for the implementation of a Home Office urgently, where, to give focus and security, it advises that throughout the days, the entire cycle that involves this new work routine be communicated, regarding professional and personal aspects of the worker (ABERJE, 2020)7:

1. Beginning of the transition process (or expansion for those who already have it).
2. Infrastructure.
3. Work routines.
4. Adaptation of routines to the new reality.
5. Health.
6. Safety.
7. Quality of life – In the midst of this confusion.
8. Support.

The problem that is already beginning to be evidenced is the issue of increased stress caused or enhanced by excessive work at home, especially cognitive work, where the mind is demanded to the extreme, with no time to recover, causing the worker's mental illness, directly related to work. And when mental illness is addressed, it becomes difficult to quantify, because for these there are no pre-established quantified exposure limits. This condition of professional exhaustion was given the name of Burnout Syndrome, which is a condition characterized by three classic signs (ANAMT, 2019)8:

1. Physical and psychic exhaustion (the feeling of not being able to handle tasks);
2. indifference and loss of personality (no longer caring about one's own professional performance, cynicism and apathy); and
3. Low job satisfaction.



The issue of work-related mental illness was already a concern before the pandemic brought about by the new Coronavirus, all over the world in general. Taking Brazil as an example, statistics show that Brazilians are increasingly sick due to their work environment, following a global trend. According to a study by the International Stress Management Association (ISMA), in 2018, one in three Brazilian workers was affected by the negative effects of stress, and only Japan had a higher number of workers affected, reaching 70% of the economically active population (ISMA, 2019)⁹.

According to Brazil's own Social Security (considering data from 2010), there are about 70,000 leaves per year, caused by depression. They accounted for 37.8% of all leaves in 2016 motivated by mental and behavioral disorders, which include not only depression, but also stress, anxiety, bipolar disorders, among others. Between 2009 and 2015, almost 97,000 people were retired due to disability due to mental and behavioral disorders, especially depression, anxiety disorders and post-traumatic stress. In all, these new benefits represent, today, a bill of R\$ 113.3 million annually to the public coffers. (ÉPOCA, 2017)¹⁰. In the latest Statistical Yearbook of Social Security (AEPS, 2020)³, it is reported that 10,537 Accident Sickness Allowances for mental and behavioral disorders were granted in 2018, compared to 9,161 granted in 2017.

Over time, the telecommuting worker distances himself from the company's environment, no longer feeling part of this organization, causing, for example, the fear of losing his job. According to ISMA (2019)⁹, the biggest cause of stress among Brazilians is the fear of losing their job. It is estimated that 3.5% of the Brazilian Gross Domestic Product (GDP) is lost due to the ills of stress related to the work environment.

What organizations must understand is that in the face of this new way of working, especially the mental health of workers must be monitored, and companies must eliminate the premise of workers' guilt for illness. Workers with mental illness should, after treatment, be reinstated to work, and no longer be exposed to situations that trigger illness, under penalty of worsening depression. The problem is that this becomes extremely difficult with teleworking.

6. THE REGULATION OF TELEWORK

In Brazil, telework was regulated by Law No. 13,467 of July 13, 2017, amending the Consolidation of Labor Laws – CLT, including Chapter II-A – On Telework, adapting our Brazilian legislation to this new form of work (CLT, 2020)¹¹.

CHAPTER IIA



TELEWORK

Article 75-A. The provision of services by the employee under a telework regime shall comply with the provisions of this Chapter.

Article 75-B. Telework is considered to be the provision of services predominantly outside the employer's premises, with the use of information and communication technologies that, by their nature, do not constitute external work.

Sole Paragraph. Attendance at the employer's premises to carry out specific activities that require the employee's presence in the establishment does not detract from the telework regime.

Article 75-C. The provision of services in the form of telework shall be expressly included in the individual employment contract, which shall specify the activities that will be performed by the employee.

Paragraph 1 - The change between the face-to-face and telework regime may be made as long as there is mutual agreement between the parties, registered in a contractual amendment.

Paragraph 2 - The telework regime may be changed to face-to-face by determination of the employer, guaranteeing a minimum transition period of fifteen days, with corresponding registration in a contractual amendment.

Article 75-D. The provisions relating to the responsibility for the acquisition, maintenance or supply of technological equipment and the necessary and adequate infrastructure for the provision of remote work, as well as the reimbursement of expenses borne by the employee, shall be provided for in a written contract.

Sole Paragraph. The utilities mentioned in the caput of this article are not part of the employee's remuneration.

Article 75-E. The employer shall instruct the employees, expressly and ostensibly, as to the precautions to be taken in order to avoid occupational diseases and accidents.

Sole Paragraph. The employee must sign a term of responsibility committing to follow the instructions provided by the employer.

Many companies in Brazil, as they had to adhere to telework abruptly, are not faithfully complying with what is contained in the CLT. First, telework must be included in the employee's individual contract, with the activities performed by him. Few companies have met this requirement.



A point that deserves a lot of attention is Article 75-E, which states that the employer is responsible for guiding the employee, preventing accidents and occupational diseases. Many workers are working from home without these guidelines, which will contribute, in the future, to the increase in diseases related to RSI/WMSD, in addition to the increase in sick leave due to mental illness.

Another major concern is in the event of an accident of a worker who develops his activities at home, in the so-called Home Office. In this case, how to define whether it was a work accident or not? For each case of this type of accident, there will be a "legal battle", where the worker will try to prove that he was in the exercise of his work when the accident occurred, while the company will try to mischaracterize the accident as being work-related.

Currently there is a new global trend in the corporate world, which is the sharing of workspaces, such as an office shared by several people, belonging to several companies, the so-called "Coworking"! This type of sharing brings an atmosphere of spontaneity, exchange of experiences to transform ideas into business, in addition to bringing savings to companies, due to the sharing of the place, reducing costs with rent, internet, furniture, among others.

Interestingly, even workers who used to work from home are preferring to work in this type of sharing, as there is a need to separate personal life from professional life. In this case, the question remains as to who is responsible for ensuring the minimum conditions of health and safety at work in this newest type of work, as provided for in the CLT itself, as the space does not belong to just one, but to several companies.

Dealing with regulation through a Regulatory Standard, the so-called NRs published by the former Ministry of Labor (currently linked to the Ministry of Economy), there is NR 17 – Ergonomics, which "came to life" in 1990, where telework practically did not exist. This rule does not address the issue of telework directly at any time, leaving preventionists without an official reference for the implementation of preventive measures in the face of the risks brought by telework. Interestingly, since its wording in 1990, NR 17 has determined that working conditions must be adapted to the psychophysiological conditions of workers, in order to provide maximum comfort, safety, and efficient performance (NR 17, 2018)¹². At this point, NR 17 was "futuristic", as it has already drawn attention to the care not only of the physical health of workers, but also of the psychic conditions, which are already beginning to aggressively affect the world of work.

Many of today's questions we will only have the answer to in the future, as there is still not enough time for data consistency in the face of teleworking.



7. THE PANDEMIC, TELEWORKING AND PREVENTION

As already discussed in this article, the pandemic accelerated several processes and forms of work, which already existed, but still timidly, such as teleworking. The Safety & Health Practitioner (SHP, 2020)¹³, already draws attention to the importance of protective measures related to health and safety, demonstrated by the new Coronavirus. If before some companies saw preventive measures in the world of work as a waste of time, now the adoption of preventive measures is the difference between the survival or failure of the company, drawing attention to the fact that these measures must be carried out.

As an increase in work-related musculoskeletal problems is expected due to teleworking, the European Agency for Safety at Health at Work (OSHA-EU, 2020)¹⁴, launched the Healthy Jobs 2020-2022 campaign, with the theme "Musculoskeletal Disorders", drawing attention to the fact that it is essential to ensure the best possible working environment to ensure the health and well-being of workers, being an obligation of all companies. It is also noteworthy that the pandemic affects the way we live and work, and that we can all benefit from the guidance and resources released.

The pandemic is also giving rise to types of offices of the future, both home and business offices. In a recent study published by the British Broadcasting Corporation (BBC, 2020)¹⁵ lists 05 types of offices of the future and their ways of working, which are emerging due to the pandemic:

1. The fully remote office: You don't have to go to the company.
2. The hybrid model: Work one or two days a week in the office and the rest remotely.
3. Remote Plus Model: One week in the office, followed by three weeks working remotely.
4. Hub and Spoke: It consists of "expanding the company, with remote offices in other cities or countries to take advantage of local skills.
5. Quality Time: Companies that prioritize the quality of production, without supervising so much the work time.

In this same publication, it is addressed about no longer being in the company, in person to work:

Certainly, for some professions, location is fundamental. But office workers are seeing a blank page. We have an incredible opportunity to redefine the way we work and rewrite the rules.



As the pandemic has accelerated teleworking, workers are beginning to realize that they are working more, so it can be discussed whether productivity has improved or not. Some predictions of decreased working hours are not coming true, especially activities that involve cognition. Jack Ma, former chairman of Alibaba, a major Chinese technology company, said at an artificial intelligence conference in Shanghai that he believes that in the future, humans will work only 12 hours a week (EL PAÍS, 2020)¹⁶.

8. FINDINGS

As a likely result with the adoption of telework, we will have a decrease in workers exposed to unhealthy and dangerous agents, bringing with it a decrease in typical work accidents.

Commuting accidents, those that happen when the worker travels from his home to work, and vice versa, also tend to decrease, as fewer workers will have to commute to work.

Other types of accidents that can be reduced in direct relation to telework, along with the increase in automation, are accidents involving amputation of limbs, especially upper limbs. According to the Statistical Yearbook of Social Security (AEPS, 2020)³, in 2018 there were 23,201 cases of fractures with the upper limbs, with 3,645 cases that led to amputation at the level of the wrist and hand.

As negative consequences, an increase in illnesses among workers is expected to be directly related to work, especially mental illness, as well as illnesses related to postural issues and repetitive work, the so-called RSI/WMSSD.

According to the Ministry of Health itself, in a survey released in April 2019, well before the pandemic, the so-called RSI/WMSSD are the diseases that most affect Brazilian workers, showing that in 10 years, the two diseases represent 67,599 cases among workers in the country. This rate increased by 184% in the same period (MINISTRY OF HEALTH, 2019)¹². In this same release, the Ministry of Health recommends preventive actions to curb these health problems for workers, drawing the attention of employers to compliance with Regulatory Standard 17, which establishes parameters that allow the adaptation of working conditions to the psychophysiological characteristics of workers, in order to provide maximum comfort, safety and efficient performance.

The issue of teleworking is here to stay, and it is already and will be a major trend for the future of work. In an interview with scholars published by El País in Spain (EL PAÍS,



2020)¹⁸, ten trends for the post-pandemic world of work were listed, such as distance education, new restaurant models, and also the issue of teleworking:

The home office was already a reality for many people, from freelancers and liberal professionals to employees of companies that already adopted the model. But this modality will grow even more. With the pandemic, more companies of different sizes started to organize themselves to work with this model. In addition, remote work avoids the need to be in crowded spaces, such as buses and subways, especially at peak times.

Another point that already deserves concern is the aging of the population, and furniture for the development of teleworking should take this into account for the "Home Offices of the Future". The Health & Safety Executive (HSE, 2020)¹⁹ itself, in its report on the future of the world of work and the health of workers in the workplace, draws attention to the ageing of the population in the United Kingdom:

In terms of demographic change, the UK population is ageing and, for the first time, the elderly outnumber children. More people tend to work in old age and with pre-existing health problems. "

At another point in this report, the concern with the adoption of preventive measures is highlighted:

An understanding of the changing environment and how it affects the workplace, and the consequences for occupational health, is vital to inform future preventive measures, regulatory approaches and the provision of occupational health services.

A major concern regarding the harmful effects on workers' health is not only the crisis that affects companies, but also how to deal with the problems that teleworking is bringing.

9. CONCLUSION

Telework is one of the changes that are taking place in the world of work, and it must be very well understood, so that preventive measures can be developed as soon as possible, to minimize the negative impacts on the health, safety, well-being and quality of life of workers.

New ways of working, especially with the advancement of technology, will have a great impact on the world of work, with consequences that are still unknown. In a recent report by OSHA-EU – European Agency for Safety in Health at Work, entitled, Foresight on new and emerging occupational safety and health risks associated with digitalisation by 2025 European Risk Observatory Report, (OSHA-EU, 2019)²⁰ in its conclusion says:



The workforce will be more diverse and dispersed, frequently changing jobs and working online rather than being present in person. All of this will give rise to challenges and opportunities, including OSH ones. It is difficult to predict these changes, so future scenarios such as those produced during this forecasting project are a valuable tool to help inform policymakers.

It is the obligation of companies to ensure a safe and healthy work environment for their workers. The European Agency for Health and Safety at Work (OSHA-EU, 2017)²¹, through the European Pillar of Social Rights, published by the European Parliament on November 17, 2017, already draws attention to the fact that workers have the right to a work environment that is adapted to their needs, which allows them to prolong their participation in the labor market. These pillars have 20 principles to which workers are entitled, such as access to essential services, health care, social protection, information on working conditions, among others. The question is: How to ensure this healthy work environment in the face of telecommuting, with increasingly informal work relationships?

What if this environment no longer physically exists? How to ensure healthy and sustainable working conditions? What about Social Security?

Other evolutions are still happening, and are already beginning to change the work relationship with telework, such as the strict control of the working day. Probably this control will be a thing of the past.

A great advantage of teleworking is a greater inclusion of People with Disabilities – PCDs, because if the worker does not need to be in the company all day, having all the difficulty of access, including public transport, and can develop all the work from home, where there is already all the adaptation to his disability, this can also be a new positive trend.

Should prevention agents focus their efforts so that the mental exhaustion of workers who work in the telework regime does not become a common disease? We face a great challenge in the face of new forms of work, including telework, and governments, companies and workers must work together to find innovative solutions that guarantee the health, safety, well-being and quality of life of those who work.

That mainly the public authorities and the business community can develop ways of analyzing future scenarios for telework, establish policies and strategies so that we can anticipate the impacts that are caused on the health of workers by this new form of work, even more so at this time, where these impacts have been practically imposed on the world of work without any type of planning, because the pandemic did not allow it.



May we offer dignified, quality telework, both for young and older workers, anticipating the problems caused by this new form of work, proposing preventive measures that ensure the health, safety, well-being and quality of life of workers.

REFERENCES

- Agência Senado. Disponível em: <
<https://www12.senado.leg.br/noticias/materias/2020/10/02/pesquisa-do-datasenado-aponta-mento-da-produtividade-em-decorrencia-do-teletrabalho-na-pandemia>>. Acesso em 27 de outubro.2020.
- Anuário Estatístico da Previdência Social. Disponível em <
<https://www.gov.br/previdencia/pt-br/acao-a-informacao/dados-abertos/previdencia-social-regime-geral-inss/dados-abertos-previdencia-social>> Acesso em 02 de novembro. 2020.
- Instituto Nacional do Seguro Social – INSS (INSS, 2017). Disponível em <
<https://www.inss.gov.br/beneficios/auxilio-doenca/auxilio-doenca-comum-ou-acidente-de-trabalho/>> Acesso em 02 de novembro. 2020.
- Saúde Ocupacional. Disponível em: <
<https://www.saudeocupacional.org/2017/04/direito-de-se-desconectar-a-nova-lei-francesa.htm>
 l#:~:text=Desde%20o%20primeiro%20dia%20deste,trabalho%20em%20hor%C3%A1rios%20de%20folga.&text=Eles%20s%C3%A3o%20mantidos%20presos%20em,de%20celular%20e%20e%20Dmails.> Acesso em 15 de maio.2020.
- RevistaExame. Disponível em: < <https://exame.com/carreira/direito-a-desconexao-ao-fim-do-expediente-ganha-forca-na-europa/>> Acesso em 15 de junho 2019.
- Associação Brasileira de Comunicação Empresarial (ABERJE, 2020). Disponível em<
<https://www.aberje.com.br/acao-integrada-compartilha-conteudo-para-adocao-de-home-office-urgente/>> Acesso em 01 de novembro. 2020.
- Associação Nacional de Medicina do Trabalho – ANAMT, 2019. Disponível em <
<https://www.anamt.org.br/portal/2019/05/28/o-que-e-a-sindrome-de-burnout-considerada-doenca-pela-oms/>> Acesso em 03 de novembro. 2020.
- Época Negócios. Disponível em:
 <<https://epocanegocios.globo.com/Carreira/noticia/2017/02/mais-de-75-mil-pessoas-foram-afastadas-do-trabalho-por-depressao-em-2016.html>> Acesso em 12 de maio 2019).
- Consolidação das Leis do Trabalho – CLT, 2020). Disponível em <
http://www.planalto.gov.br/ccivil_03/decreto-lei/del5452.htm> Acesso em: 02 de novembro. 2020).
- Norma Regulamentadora 17, (NR 17, 2018). Disponível em <
https://sit.trabalho.gov.br/portal/images/SST/SST_normas_regulamentadoras/NR-17.pdf> Acesso em 03 de novembro. 2020).
- Safety & Health Practitioner (SHP, 2020). Disponível em <
https://www.shponline.co.uk/blog/health-and-safety-lessons-from-covid-19/?elq_mid=4649&elq_cid=1648258> Acesso em: 15 de outubro. 2020.



OSHA-EU – European Agency for Safety na Health at Work. Disponível em < <https://osha.europa.eu/es/highlights/lighten-load-eu-osha-launches-healthy-workplaces-campaign-2020> >

British Broadcasting Corporation (BBC, 2020). Disponível em < <https://www.bbc.com/mundo/noticias-54356853> > Acesso em 15 de outubro. 2020).

EL PAÍS, 2019. Disponível em < https://elpais.com/economia/2019/08/29/actualidad/1567076867_110475.html > Acesso em 15 de outubro. 2019.

Ministério da Saúde, 2019. Disponível em < <https://www.gov.br/saude/pt-br/assuntos/noticias/ler-e-dort-sao-as-doencas-que-mais-acometem-os-trabalhadores-aponta-estudo> > Acesso em 20 de outubro. 2020.

EL PAÍS – Como o Coronavírus vai mudar nossas vidas: dez tendências para o mundo pós-pandemia. Disponível em < <https://brasil.elpais.com/opinio/2020-04-13/como-o-coronavirus-vai-mudar-nossas-vidas-dez-tendencias-para-o-mundo-pos-pandemia.html> > Acesso em 03 de novembro 2020.

Health & Safety Executive – The future world of work and workplace health. Disponível em < <https://www.hse.gov.uk/horizons/assets/documents/foresight-report-2018.pdf> > Acesso em 01 de novembro.2020.

OSHA-EU – European Agency for Safety na Health at Work, com o título, Foresight on new and emerging occupational safety and health risks associated with digitalisation by 2025 European Risk Observatory Report. 2018.

OSHA – EU - European Agency for Safety na Health at Work. Disponível em < <https://osha.europa.eu/en/about-eu-osha/what-we-do/corporate-strategy-and-work-programmes/supporting-european-pillar-social-rights> > Acesso em 09 de maio. 2019.