

## COVID-19 and workers' health: standards, general issues and potential impacts of changes in smell

COVID-19 y la salud de los trabajadores: normas, cuestiones generales y posibles impactos de los cambios en el olfato

COVID-19 e a saúde dos trabalhadores: normas, questões gerais e potenciais impactos das alterações do olfato

## Maria de Fátima Torres Faria Viegas<sup>1\*</sup>

ORCID: 0000-0002-7980-9077 **Erick Braga Ferrão Galante<sup>2</sup>** ORCID: 0000-0002-7315-046X **Nivaldo Ribeiro Villela<sup>3</sup>** ORCID: 0000-0002-5947-9189 **William Waissmann<sup>4</sup>** 

ORCID: 0000-0002-7632-6555

<sup>1</sup>Fundação Jorge Duprat Figueiredo de Segurança e Medicina do Trabalho. Rio de Janeiro, Brazil. <sup>2</sup>Instituto Militar de Engenharia. Rio de Janeiro, Brazil. <sup>3</sup>Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brazil. <sup>4</sup>Fundação Oswaldo Cruz. Rio de Janeiro, Brazil.

### How to cite this article:

Viegas MFTF, Galante EBF, Villela NR, Waissmann W. COVID-19 and workers' health: standards, general issues and potential impacts of changes in smell. Glob Acad Nurs. 2023;4(4):e384. https://dx.doi.org/10.5935/2675-5602.20200384

## \*Corresponding author:

mftviegas0@gmail.com

**Submission:** 10-11-2023 **Approval:** 11-30-2023

#### Abstract

The aim was to analyze the impacts of the SARS-CoV-2 pandemic on the world of work and its consequences in the fields of worker health, and public and collective health in dialogue with the relevant legislation. We present an Academic Essay, which addresses elements related to Occupational Health and Safety in the fight against COVID-19. To contextualize the topic, we highlight the vast number of cases and deaths, with Brazil being one of the most affected countries, normative aspects, and the physical, mental, and labor consequences of olfactory dysfunctions resulting from this infection, with a focus on the progressive dismantling of the Unified Health System. Health that made it possible, in a relevant way, to face the pandemic, as it was public and universal. This essay also addresses the burden faced by workers in the face of olfactory changes, a pressing and predictive symptom of COVID-19. Given this premise, we were able to contextualize and shed light on the precariousness of work, the potential risk of unemployment and, highlight relevant impacts on health, as well as suggest emergency actions in pandemics. The text therefore reinforces the importance of updating health legislation regarding disease control, precarious work and discussions that mediate the imperative need for normative production, which involves worker health and safety.

Descriptors: COVID-19; Smell; Mental Health; Legislation; Public Policy.

#### Resumén

El objetivo fue analizar los impactos de la pandemia SARS-CoV-2 en el mundo del trabajo y sus consecuencias en los ámbitos de la salud de los trabajadores, la salud pública y colectiva en diálogo con la legislación pertinente. Presentamos un Ensayo Académico, que aborda elementos relacionados con la Seguridad y Salud en el Trabajo en la lucha contra el COVID-19. Para contextualizar el tema, destacamos el gran número de casos y muertes, siendo Brasil uno de los países más afectados, los aspectos normativos y las consecuencias físicas, mentales y laborales de las disfunciones olfativas resultantes de esta infección, con foco en el desmantelamiento progresivo. del Sistema Único de Salud que permitió, de manera relevante, enfrentar la pandemia, por ser pública y universal. Este ensayo también aborda la carga que enfrentan los trabajadores ante los cambios olfativos, un síntoma apremiante y predictivo del COVID-19. Ante esta premisa, pudimos contextualizar y arrojar luz sobre la precariedad del trabajo, el riesgo potencial de desempleo y, resaltar impactos relevantes en la salud, así como sugerir acciones de emergencia en pandemias. Por lo tanto, el texto refuerza la importancia de actualizar la legislación sanitaria en materia de control de enfermedades, trabajo precario y discusiones que median la necesidad imperiosa de producción normativa, que involucra la salud y seguridad de los trabajadores.

Descriptores: COVID-19; Disfunción Olfativa; Salud Mental; Legislación; Políticas Públicas.

### Resumo

Objetivou-se analisar os impactos da pandemia de SARS-CoV-2 no universo laboral e suas consequências nos campos da saúde do trabalhador, saúde pública e coletiva em diálogo com as legislações pertinentes. Apresentamos um Ensaio Acadêmico, que aborda elementos relacionados à Saúde e Segurança do Trabalhador na luta contra a COVID-19. Para contextualização do tema, ressaltamos o vasto número de casos e mortes, sendo o Brasil um dos países mais atingidos, aspectos normativos e as consequências físicas, mentais e laborais das disfunções olfativas decorrentes da tal infecção, com foco no desmonte progressivo do Sistema Único de Saúde que viabilizou, de forma relevante, o enfrentamento da pandemia, por ser público e universal. Este ensaio aborda ainda o fardo que enfrenta o trabalhador diante das alterações olfativas, um sintoma premente e preditivo da COVID-19. Diante desta premissa, pudemos contextualizar e jogar luz sobre a precarização do trabalho, o risco potencial de desemprego e, evidenciar relevantes impactos sobre a saúde, bem como, sugerir ações emergenciais em pandemias. O texto reforça, portanto, a importância da atualização da legislação sanitária referente ao controle de doenças, a precarização do trabalho e as discussões que medeiam a imperiosa necessidade de produção normativa, que envolve a saúde e a segurança do trabalhador.

Descritores: COVID-19; Disfunção Olfativa; Saúde Mental; Legislação; Políticas Públicas.



Viegas MFTF, Galante EBF, Villela NR, Waissmann W

### Introduction

Since its beginning, almost three years ago, the coronavirus pandemic has had a strong impact. In addition to the growing number of sick and dead people, the economic effect has been impressive, ranging from direct costs related to healthcare to indirect costs on countries' economies. We can still observe the considerable effect on work, with job losses, unemployment, and impacts on the mental and physical health of workers. This essay is, obviously, extremely relevant, as it addresses elements related to Occupational Health and Safety in the fight against COVID-19, in particular, olfactory dysfunctions (OD) and normative aspects, with an unprecedented nature in the current context.

On March 11, 2020, the World Health Organization (WHO) declared the outbreak caused by the new coronavirus (SARS-CoV-2) a global pandemic. Detected for the first time in December 2019, in the city of Wuhan, China, the virus causes a disease called COVID-19 (Coronavirus disease 2019), whose clinical picture varies from asymptomatic infections to severe respiratory and systemic conditions. In Brazil, the first case was reported on February 21, 2020, in São Paulo<sup>1,2</sup>.

The dissemination of information began to take place almost in real-time. The website created by Johns Hopkins University and the WHO itself is an example of a widely used dissemination environment, which releases daily reports on the evolution of the pandemic and describes the main changes that have occurred concerning the situation of the previous day. In WHO data, globally, as of 17:46 CET on 5 December 2022, there have been 641,435,884 confirmed cases of COVID-19, including 6,621,060 deaths reported to WHO. As of November 30, 2022, a total of 13,042,112,489 vaccine doses have been administered<sup>3</sup>.

In Brazil, on December 5, 2022, 35,396,191 cases and 690,229 deaths had been recorded<sup>3</sup>. The one that provides the necessary basis for actions to combat COVID-19 is the Unified Health System (SUS), as it is public, universal, and has a widespread network of services, equipment, and human resources, albeit deficient. Underfunded, with a lack of investment (especially in the last five years, after the approval of Constitutional Amendment 95), the dismantling and dismantling of the SUS become more evident in times of crisis, such as the pandemic. Without SUS, the catastrophe would have been much greater. However, the insufficient and chronic number of human resources in health; the lack of training of primary care and medium complexity teams to deal with suspected cases and cases of COVID-19 and its most diverse variants; the insufficient number of personal protective equipment (PPE) and its consequent use in conditions that are far from ideal; the lack of professionals specialized in emergency services; the few internal prevention actions in care spaces; the unpreparedness and lack of protection of health teams about the pandemic had a direct impact on the health of health teams and the working population, which could have been of lesser importance with a properly financed and organized system.

The pandemic also reinforced the understanding that health legislation regarding the control of communicable diseases and the discussions that mediate the imperative need for normative production that involves the health and safety of workers, when facing health emergencies, need to be updated. public. To enforce the National Workers' Health Policy (PNSTT), the Brazilian State, in its fundamental role, must guarantee health and safety during the execution of its productive activities. It was possible to verify, however, the clear insufficiency of the national legal framework in providing the Public Power with legal bases for rapid action in the face of such emergencies, whatever they may be<sup>4-6</sup>.

In the meantime, Brazilian states, as can be seen, in a joint action promoted individual and collective actions to deal with the health and economic impacts, with an emphasis also on the labor market. The South and Southeast Integration Consortium (COSUD) and the Scientific Committee to Combat Coronavirus (C4NE) were then created, both aiming to propose economic and fiscal measures that would help local governments face the health crisis, enabling governors to find the best possible way to plan the allocation of resources to combat the proliferation of the virus and structure the health system, associated with the adoption of social isolation measures, little or not discussed within the scope of current legislation 1,4,6,7.

Given the above, the objective of this study was to analyze the impacts of the SARS-CoV-2 pandemic on the world of work and its consequences in the fields of worker health, and public and collective health in dialogue with the relevant legislation.

## Methodology

The study was based on evidence-based practice (EBP) references, as well as relationships with health technology assessment and research, topics covered below to provide a general overview of its history and concepts. The method in question is an academic essay, which corresponds to a genre of writing commonly used in the academic context to present an analysis, interpretation, or argument on a specific topic. Its main characteristic is the presentation of a reasoned, logical, and well-structured argument, which is based on evidence, research, and relevant bibliographic references, as well as the relevance of the authors' opinion.

This study had the month of June 2022 as its starting point. The search strategies aimed at a complete search, including descriptors (Medical Subject Headings - Mesh) and free terms, in the following databases: MedLine via PubMed, SciELO, Scopus, Embase, Google Scholar, Web of Science, and LILACS. After the search, the references from each database were exported to a reference manager (ZOTERO), to identify all duplicate articles, promoting greater reliability in the selection and proceeding to the article eligibility stage.

Given the above, based on the topic in question, the results were categorized, analyzed, and discussed based on labor impacts and worker health.



Viegas MFTF, Galante EBF, Villela NR, Waissmann W

### **Results and Discussion**

The precariousness of work and the risk of unemployment have intensified in times of pandemics, like the one we are experiencing. This generates a series of impacts on workers' health since economic instability and job insecurity can lead to stress, anxiety, and depression. Given this scenario, the implementation of emergency actions becomes essential to mitigate these effects. However, an additional concern that arises in times of pandemic, especially as one of the consequences of the socalled long COVID, is the impact of the loss of smell on the quality of life of workers, notably those who perform organoleptic activities. The loss of this sense, often associated with virus infection, can affect the ability to carry out professional tasks effectively, compromising safety and productivity in the workplace. Therefore, worker health and strategies to preserve it play a central role in managing pandemic crises.

# Precarious work, risk of unemployment and worker health: emergency actions in pandemics

Maeno<sup>8</sup> shows challenges to be understood and faced in our country, notably regarding actions and propositions aimed at the working population and their working conditions, highlighting that with an economically active population (EAP) of more than 100 million people, it was predictable that work activities were the great mobilizers of human masses, making each individual a "potential disseminator", whether certainly in public transport, our greatest obstacle, and in workplaces or homes, thus reflecting the high rate of community transmission. We can mention the incongruity of the determination and concept of essentiality of some activities, without any or minimal restrictions on work at peak times of the disease, nor the necessary non-pharmacological precautions, which largely favored its spread. I reiterate that the word "lockdown" has never been a consensus in this country, whether through public policies or the behavior of the population, possibly due to misinformation or influenced by the much-vaunted fake news (false information) or even the absence of government incentives.

Following this logic, Maeno<sup>8</sup> discusses face-to-face work, which is predominated over remote work and is recognized as an aspect of vulnerability for workers. Compulsory in-person work is known to require the use of public transport, which is sometimes precarious, the need to face crowds and physical proximity, prolonged stay in closed environments, with inadequate ventilation, an important cause of transmission, without renewal of ambient air and unavailability of more protective and effective masks, as well as their appropriate use, a set of situations that increase the chances of exposure to the virus. Therefore, the author emphasizes, "the classification of workers between essential and non-essential services, due to Brazilian peculiarities, is not a reliable reference in terms of exposure to potentially sickening situations"<sup>8:2</sup>.

The Brazilian State should guarantee social protection for the entire working class, including those facing problems with deregulation, given the high number of

informal workers. Faced with such social inequality and the high number of workers inserted in the informal economy or unemployed, the impact of pandemics on workers' health is devastating, corroborating the indispensability of guaranteeing a basic income for individuals prevented from working<sup>9,10</sup>.

Therefore, Barroso¹ affirms that it is imperative to implement the principles and actions recommended by the National Workers' Health Policy and other labor policies and legislation, as well as their creation, reformulation, continuous reevaluation, and implementation of pertinent and effective measures within the scope health and occupational safety of workers, of all services considered essential in Brazil (even with Maeno's² reservation that there may be inadequacies in the Brazilian case).

coronavirus pandemic has transformations throughout the world, whether in the way of coexistence, in the restrictions caused, and in work relationships, notably concerning the zeal and greater care of employers regarding the health, hygiene, and safety measures that have become first-order question, even if imposed, to avoid the characterization of an occupational disease resulting from COVID. Regarding the legislative issue, several norms were enacted to regulate procedures related to the world of work, some of them to prioritize the workers in their work activities, for the survival or maintenance of jobs, to advocate for the recognition of COVID-19 as a workrelated disease, based on the concepts, among others, of greater risk of exposure and application of the principle of inversion of the burden of proof, that is, the company is the one who must prove that the professional activity was not the reason for employee contamination of the virus. Decree No. 3048, of May 6, 1999, which approves the Social Security Regulations, uses epidemiological criteria to establish the presumed causal link between certain health problems for workers and work in some economic activities. The risk in professional categories in the health sector (around fourteen) who work on the front line of the fight against the pandemic, is pressing and indisputable<sup>8,11</sup>.

The recognition that illnesses can be related to work is old. We know that occupational disease is the term used to describe work-related illnesses. It is considered a legal term and is associated with financial compensation for those with occupational diseases. In the case of COVID-19, several professional categories were more exposed to infection at work, such as healthcare professionals, teachers, public transport drivers, hairdressers, and retail workers, among many others. Still, to date, we do not know the exact number of work-related COVID-19 cases<sup>12,13</sup>.

Social Security, in December 2020, guided its medical expertise to admit the possibility of establishing a causal link with work, "when the disease results from the special conditions in which the work is performed and is directly related to it", reinforcing two premises, that the instance to establish such a condition of work-related illness is, solely, the Federal Medical Expertise and that the principle of presumption will not be considered. Its official data showed that from 113 cases of virus diseases reported as work-related in 2019, there was a jump in 2020 to 20,797

Viegas MFTF, Galante EBF, Villela NR, Waissmann W that is, the causal link, the link between the cause and the effect, must be proven, and it is necessary to demonstrate

that the confirmation of COVID-19 was acquired in the environment or due to the work<sup>14</sup>.

cases registered with B34 or U07, International Classification of Diseases (ICD) codes recommended for recording COVID. -19. Regarding occupations in Brazil, Maeno<sup>8</sup> informs that in the cases of COVID-19 reported in the first year of the pandemic, the vast majority belonged to the health sector, as expected, given the greater exposure, including nursing technicians and assistants, nurses, clinical doctors, agents' community health workers, physiotherapists, radiology and imaging technicians, and hospital waiters. In the case of workers clearly outside the health sector, "margarines" appear, referred to as slaughterhouse workers.

All countries must develop compensation and notification systems for occupational diseases, which in Brazil we still consider an obstacle. Those insured under the General Social Security Regime, according to Maeno<sup>8</sup>, which include, among others, employees with an employment relationship governed by the Consolidation of Labor Laws (CLT), have different rights in the case of temporary or permanent incapacity resulting from an accident, or illness with a causal link with work, recognized by federal medical expertise. In the case of absence from work for more than 15 days, motivated by occupational COVID-19, the insured receives an accident sickness benefit, called disability benefit under the social security law regulations, regardless of the contribution time, as it is exempt from the required waiting period. for non-occupational diseases. At the time of cessation of accident aid due to incapacity, if there is a definitive consequence that involves a reduction in the capacity for usual work, the worker may start to receive accident aid as monthly compensation, until the date of retirement.

International organizations, namely the International Labor Organization (ILO), the World Health Organization (WHO) and the European Union (EU), according to the author, must plan and carry out studies on the COVID-19 labor relationship, propose criteria recognition, and add the infection to the list of occupational diseases, to provide a basis for country-specific regulations. In a brief history, in Brazil, on August 28, 2020, Ordinance No. 2309 was published, which amended Consolidation Ordinance No. 5/GM/MS, of September 28, 2017, and updated the List of Work-Related Illnesses (LDRT). This author participated in the discussion to prepare Ordinance No. 2309 as a representative of the Jorge Duprat Figueiredo Foundation for Occupational Safety and Medicine. In this list, which opposes Art. 29 of MP 927, of March 22, 2020, is the inclusion of the disease caused by SARS-CoV-2 in work activities (COVID-19). To our surprise, on September 2, 2020, Ordinance No. 2345 was published, which revoked Ordinance No. 2,309 of 2020, which updated the LDRT | COVID-19 as an occupational disease. The previous regulation lost its validity in less than 24 hours. In publications in the various media, we were able to observe that the Minister of Health at the time, Mr. Eduardo Pazuello, did not present the explanation of reasons that led him to revoke such ordinance, however, we were able to learn that the decision adopted had an epidemiological basis, interpreting that it would be It is necessary to analyze the place and the way in which the contamination occurred,

When dealing with this pertinent topic, it is important to consider that seven Direct Unconstitutionality Actions (ADIs 6342 - 6344 - 6346 - 6348 - 6349 - 6352 - 6354) were being processed in the Federal Supreme Court (STF), which dealt with the suspension of the effectiveness of Art. 29 of MP 927/2020, whose provision provided that "cases of contamination by the coronavirus (COVID-19) will not be considered occupational, except upon proof of the causal link". Because of this, under the terms of MP 927/20, COVID-19 would only be considered an occupational disease if there was, on the part of the infected employee, proof that work was the cause of the contamination. In parallel, several manifestos, including from numerous legal advisors and political parties, proposed direct actions unconstitutionality, before the STF, questioning the content of the provision.

In a plenary session, on 04/29/20, the STF suspended the effectiveness of two articles of MP 927/20, 29, and 31. As for article 29 under discussion, the STF understood that "[...] giving the employee the burden of proving that your illness is work-related is sometimes impossible." This decision is since article 29, as provided for in MP 927/20, left employees without due protection and companies without primary attention to precautions regarding the work environment. In this way, with the suspension of article 29, employees in any activity can acquire the disease depending on the environmental working conditions, therefore, if the company does not ensure a healthy environment, contamination could lead to serious injuries.

At this point, despite the STF's decision, Law No. 8,213/1991, which deals with the topic, remains in force, and establishes a series of requirements for characterizing the disease as occupational and has been the guiding standard for the analysis of cases of COVID-19 infection.

Some jurists agree that, during the pandemic, the causal link may be easy to prove; as the virus can be everywhere, consequently, if the company that is in operation does not demonstrate, peremptorily, that it adopts very detailed and responsible occupational health and safety measures, and also, provision of PPE (personal protective equipment), as well as EPC (collective protective equipment) for its employees, it may be easy for the employee to prove that they became infected in the workplace. That said, the main instrument that companies will have to protect themselves "against" the classification of COVID-19 as an occupational disease or work-related illness will be to enforce and demand that their employees comply with all safety and occupational health standards, duly granted by companies, so that the employer, if necessary, provides detailed information about the operations carried out to combat the spread of the coronavirus and, consequently, to prevent contagion among its employees, through written communications, with a copy of receipt, copy and -mails or social media, about all the risks to which they will be exposed during work and prevention measures;

in addition to training on the precautions they should take to avoid contracting COVID-19, through pre-scheduled meetings, seminars, etc.

According to Souto<sup>15</sup>, It is essential to highlight that not acting preventively will certainly have a very high cost for companies, which strongly reveals the value of worker health and safety in such a context; because in the case in which the employee is affected by COVID-19 during work, the consequences will be as follows, according to the author: a) stability of the employee in employment for 12 (twelve) months, if there is a perception, by the same, accident social security benefit; b) labor actions requesting compensation for moral and material damages due to the development of an occupational disease; c) increase in the Social Security Factor (FAP) of companies, a rate that serves as the basis for calculating the Environmental Risk at Work (RAT), formerly Work Accident Insurance (SAT), a contribution that applies to the remunerations paid by companies to their employees and casual workers.

The insufficiency of protective actions and equipment is just one of the aspects observed in the process of devaluation and degradation of health work. Several studies carried out so far, publications, and various reports have demonstrated reports from professionals in the field who describe the hard and long working hours; physical and mental exhaustion; the lack of assistance from managers and the Brazilian government system; and the lack of equipment and devices essential for the diagnosis and treatment of individuals with clinical conditions suspected contaminated by the virus (rapid tests, respirators, oxygen, among others). Health, public or private, has never been so exposed. This scenario revealed several problems, such as the impossibility of carrying out rapid testing on a large scale due to the lack of public policy for this, and of vaccines and treatments with scientifically proven efficacy at the time<sup>1,16,17</sup>.

# Impacts of smell loss on quality of life: an occupational concern?

The WHO defines quality of life (QOL) as "the individual's perception of their insertion in life, in the context of the culture and value systems in which they live and concerning their objectives, expectations, standards and concerns". It involves spiritual, physical, mental, psychological, and emotional well-being, in addition to social relationships, such as family and friends, and health, education, housing, basic sanitation, work, and other life circumstances<sup>18</sup>.

Olfactory dysfunction (OD), if prolonged for at least two months, can be a real disorder and can certainly compromise patients' QoL, in addition to putting worker safety at risk, depending on the activity performed. Furthermore, we reinforce the labor issue here, as in specific situations, especially in professions where smell and taste are essential, work may become unfeasible, which will lead to even greater problems. Therefore, coping strategies have played a fundamental role in the treatment of such disorders, since therapy is still limited or non-existent and not very accessible. The burden faced by workers in such

Viegas MFTF, Galante EBF, Villela NR, Waissmann W circumstances are economic issues, sometimes unsustainable, such as the risk of unemployment, which have an impact on their QoL and interpersonal relationships.

With the not-uncommon association of olfactory and taste disorders with COVID-19, these, alone or associated with other CNS changes, may be the cause of changes present in the disease. We have been able to observe, over the last few years, negative effects in patients with OD, such as decreased pleasure in food, lack of appetite, difficulty cooking and detecting spoiled food, changes in body weight, reduced safety, doubts about personal hygiene, feelings of vulnerability, mood swings, depression and deterioration in social interactions and professional life, in the most diverse categories, as well as in sexual life.

In numerous studies, DO has been demonstrated as one of the first among other neurological manifestations in hospitalized patients with mild COVID-19<sup>19</sup>. Global pandemics are associated with adverse consequences for mental health. According to Rajkumar<sup>20</sup>, Early evidence suggests that symptoms of anxiety, depression, and selfreported distress are common psychological reactions to the COVID-19 pandemic and may be associated with sleep disturbances. However, studies on the determinants of psychological distress rarely focus on the clinical manifestation of SARS-CoV-2 and some of them observed the association of psychological distress and olfactorygustatory symptoms, confirmed in our daily practice, especially when there are overlapping factors, such as issues that directly affect worker health, safety, and stability. We highlighted patients with feelings of loneliness, fear, and depression, as well as reports of difficulties in social and sexual relationships and concerns about personal hygiene resulting from anosmia.

In a cross-sectional study, Dudine<sup>19</sup>, reveals that regarding psychological suffering, most participants declared moderate to high distress and the most frequent manifestations were anxiety, irritability, negative mood, and feelings of loneliness. According to the author, olfactory and taste dysfunctions in individuals with mild to moderate symptoms of COVID-19 are associated with higher levels of psychological distress compared to those who do not present such changes. Anxiety and depressive symptoms are the most frequent responses. Furthermore, the high risk of infection and reinfection, lack of testing, adequate protection against contamination, demand and overwork, frustration, concern for family and job stability, and inability of the health system to meet demand excessive, were able to corroborate this disturbing scenario. Psychological interventions aimed at professionals, especially those in the health sector who have contracted COVID-19 infection, must be designed considering the effects of symptoms and reintegration into work, which must take into account the anxiety and depression experienced by workers who have become ill, and the importance of collaboration in support services for health care providers between occupational physicians, occupational psychologists and clinicians to study work-related risks and rely on public policies that strengthen the performance of the SUS.

Viegas MFTF, Galante EBF, Villela NR, Waissmann W

It should be noted that health professionals can lose their reference in pathologies that exhibit the most diverse effluvia, which can compromise their early diagnosis, as well as, for cooks, wine tasters, perfumers, nurses, or firefighters, OD can be catastrophic. For some, it will be necessary to implement restrictions or adjustments, but for others, it may not be viable to continue in the same profession.

We conclude, therefore, that there is a substantial impairment of QoL and personal safety, including work, attributable to the OD observed in individuals with COVID-19, with potentially serious consequences. Given this, we urgently recommend the implementation of screening and treatment programs to minimize the potential long-term behavioral consequences of COVID-19.

## **Final Considerations**

In agreement with Barroso<sup>1</sup>, even today, it is imperative to safeguard the implementation of the principles and actions recommended by the National Workers' Health Policy and other labor policies and legislation, as well as create, reformulate, and implement effective measures in the field of health and occupational safety of workers in all services considered essential in Brazil. Among other challenging and unprecedented aspects posed by the pandemic, the high viral load and its rapid transmissibility stand out, in addition to the multiplicity of variants - which often makes us doubt that this disease will ever end - which require management and decision-making mechanisms, quick and efficient decision-making processes to guarantee protection, good QoL, and more dignified working conditions for all workers. This process is still slow in our country, as we know that the government's management of health is unworthy, which greatly contributed to an exponential increase in the suffering of the population at its most diverse levels, whose managers dedicated themselves to promoting misinformation, in addition to little value measures based on scientific evidence of the highest level, lack of a universal testing policy to contain COVID, high number of cases and deaths, and an approach completely disconnected from reality, even about

vaccination, "gold standard" for eradicating the disease. Another fundamental decision is the establishment and maintenance of a basic income for populations facing high unemployment rates and a high incidence of the informal economy.

Regarding the workspace, organizational and collective measures by companies are essential, highlighting communication and understanding among workers. The Specialized Services in Occupational Safety and Medicine (SESMT) are an important part of monitoring the health of workers, also during pandemics, and plans should be articulated with the competent bodies of the SUS and including measures that, when adopted by companies, can be useful to mitigate the impact of pandemics in these spaces<sup>8</sup>. Given this, the participation of workers in the construction of procedures in companies' action plans is essential, and the transparency of such actions is essential, which, linked to reliable and updated scientific bases and in line with the guidelines of health authorities, can generate routines to be expanded to establish more egalitarian and democratic relationships, which raise the hope of daily life with greater protection for workers' health8.

Regarding the loss of smell, in the long term, it can increase the likelihood of future development of cognitive and neurological deficits, such as problems with attention, concentration, general and short-term memory, language, verbal coding, and verbal fluency, requiring further study<sup>21</sup>.

In the end, this essay, written in the heat of an overwhelming pandemic, aims at a profound reflection<sup>22</sup> and broad discussion, subject to review, and provokes the debate that this pandemic has returned to the agenda the defense of the SUS and its notorious principles of universality, integrality, and equity, as well as that of systems guaranteeing the rights of the Brazilian working class, namely, the right to access health services; social protection, in cases where it is impossible to carry out work activities; to dignified, equipped and protected health workers and essential public and private services; to a basic income, in case of unemployment or deregulated work; and, more than ever, the fundamental right to life, excelling for its quality<sup>1</sup>.

### References

- 1. Barroso BIL, Souza MBCA, Bregalda MM, Lancman S, Costa VBB. A saúde do trabalhador em tempos de COVID-19: reflexões sobre saúde, segurança e terapia ocupacional. Cad. Bras. Ter. Ocup. 2020;28(3):1093–1102. https://doi.org/10.4322/2526-8910.ctoARF2091
- 2. Gorbalenya AE, Baker SC, Baric RS, de Groot RJ, Drosten C, Gulyaeva AA, Haagmans BL, Lauber C, Leontovich AM, Neuman BW, Penzar D, Perlman S, Poon LLM, Samborskiy D, Sidorov IA, Sola I, Ziebuhr J. Severe acute respiratory syndrome-related coronavirus: The species and its viruses a statement of the Coronavirus Study Group. Microbiol 2020. http://biorxiv.org/lookup/doi/10.1101/2020.02.07.937862
- 3. Johns Hopkins. Coronavirus Resource Center [Internet]. Johns Hopkins University & Medicine; 2020 [acesso em 27 mai 2022]. Disponível em: https://coronavirus.jhu.edu/map.html
- 4. Romero LCP, Delduque MC. O Congresso Nacional e as emergências de saúde pública. Saúde Soc. 2017;26(1):240–255. https://doi.org/10.1590/S0104-12902017156433
- 5. Nacional Imprensa Diário Oficial da União (DOU). Portaria n.º 2.309, de 28 de agosto de 2020 DOU Imprensa Nacional [Internet]. 2020 [acesso em 19 mai 2022]. Disponível em: https://www.in.gov.br/web/dou
- 6. Lacaz FAC, Reis AAC, Lourenço EAS, Goulart PM, Trapé CA. Movimento da Reforma Sanitária e Movimento Sindical da Saúde do Trabalhador: um desencontro indesejado. Saúde Debate. 2020;43(spe8):120–132. https://doi.org/10.1590/0103-11042019S809
- 7. 1. Comitê Científico de Combate ao Coronavírus do Consórcio Nordeste (C4NE). Resolução n.º 005 que institui o comitê científico de apoio ao combate à pandemia do coronavírus [Internet]. 2020 [acesso em 19 mai 2022]. Disponível em: http://www.consorcionordestene.com.br



## COVID-19 and workers' health: standards, general issues and potential impacts of changes in smell

Viegas MFTF, Galante EBF, Villela NR, Waissmann W

- 8. Maeno M. COVID-19 como uma doença relacionada ao trabalho. Rev. bras. saúde ocup. 2021;46:e54. https://doi.org/10.1590/2317-6369ED0000121
- 9. Almeida IM. Proteção da saúde dos trabalhadores da saúde em tempos de COVID-19 e respostas à pandemia. Rev. bras. saúde ocup [Internet]. 2020 [acesso em 27 mai 2022];45. Disponível em: http://www.scielo.br/j/rbso/a/yyZ869N3cDZpLdsTJvNkvKb/?lang=pt
- 10. Melo BD, Pereira DR, Noal DS, Serpeloni F, Kabad JF, Kadri M, Souza MS, Rabelo IVM. Gestão e organização dos serviços e dos cuidados em saúde. Recomendações para os Gestores. In: Noal DS, Passos M. F. D. & de Freitas C. M. (Orgs.). Recomendações e orientações em saúde mental e atenção psicossocial na COVID-19. Rio de Janeiro: Fiocruz; 2020.
- 11. Zimmermann CL. A covid-19 nos ambientes de trabalho e a possibilidade do enquadramento como doença ocupacional para fins de emissão de CAT. Ministério Público do Trabalho no Rio de Janeiro; 2020.
- 12. Ramazzini B. As doenças dos trabalhadores. Ministério do Trabalho. 4ª ed. São Paulo: FUNDACENTR; 2000.
- 13. Moen BE. COVID-19 should be recognized as an occupational disease worldwide. Occup Med. 2020;70(5):299. https://doi.org/10.1093/occmed/kgaa086
- 14. Sandal A, Yildiz AN. COVID-19 as a recognized work-related disease: the current situation worldwide. Saf Health Work. 2021;12(1):136–138. https://doi.org/10.1016/j.shaw.2021.01.001
- 15. Souto XM. COVID-19: aspectos gerais e implicações globais. Recital. 2020;2(1):12–36. https://doi.org/10.46636/recital.v2i1.90
- 16. Cucinotta D, Vanelli M. WHO Declares COVID-19 a Pandemic. Acta Biomed Atenei Parmensis [Internet]. 2020 [acesso em 19 mai 2022];91(1):157–160. Disponível em: https://www.mattioli1885journals.com/index.php/actabiomedica/article/view/9397
- 17. Candido DS, Watts A, Abade L, Kraemer MUG, Pybus OG, Croda J, de Oliveira W, Khan K, Sabino EC, Faria NR. Routes for COVID-19 importation in Brazil. J Travel Med. 2020;27(3):taaa042. https://doi.org/10.1093/jtm/taaa042
- 18. World Health Organization (WHO). The World Health Organization Quality of Life Assessment (WHOQOL): position paper from the World Health Organization. Social science and medicine. 1995;41(10):403-409. https://doi.org/10.1016/0277-9536(95)00112-K
- Dudine L, Canaletti C, Giudici F, Lunardelli A, Abram G, Santini I, Baroni V, Paris M, Pesavento V, Manganotti P, Ronchese F, Gregoretti B, Negro C. Investigation on the loss of taste and smell and consequent psychological effects: a cross-sectional study on healthcare workers who contracted the COVID-19 infection. Front Public Health. 2021;9:666442. https://doi.org/10.3389/fpubh.2021.666442
- Rajkumar RP. COVID-19 and mental health: a review of the existing literature. Asian J Psychiatr. 2020;52:102066. https://doi.org/10.1016/j.ajp.2020.102066
- 21. Doty RL. Olfactory dysfunction in COVID-19: pathology and long-term implications for brain health. Trends Mol Med. 2022;28(9):781–794. https://doi.org/10.1016/j.molmed.2022.06.005
- 22. Faria MGA, Fonseca CSG. Pandemia de COVID-19 e de desinformação: um panorama do Brasil. Glob Acad Nurs. 2020;1(1):e1. https://dx.doi.org/10.5935/2675-5602.20200001

