Information and Communication Network on the Exposure of Workers to Sars-CoV-2 in Brazil

Rede de Informações e Comunicação sobre a Exposição de Trabalhadores/Trabalhadoras ao Sars-CoV-2 no Brasil

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ABSTRACT The purpose of this experience report was to present the partial results, potentials, and reflections on the implementation of the Information and Communication Network on the Exposure of Workers to Sars-CoV-2 in Brazil. This Information and Communication Network seeks to contribute to the production and dissemination of information on combating the pandemic, disseminating health prevention norms and guidelines for workers who are performing on-site activities in various productive branches during the pandemic. Simultaneously, the Network developed instruments to record the exposure situation of these workers, due to the interinstitutional action of the teaching and research units, services, and the representation of organized civil society. The integrated information and communication actions aim to articulate knowledge, practices and public policies with the objective of strengthening the National Policy for Workers' Health and actions aimed at promoting health in populations exposed occupationally and environmentally to Sars-CoV-2.

KEYWORDS Occupational health. Occupational exposure. Communication. Covid-19. Brazil.

RESUMO *O* objetivo deste relato de experiência foi apresentar os resultados parciais, potencialidades e reflexões sobre a implantação da Rede de Informações e Comunicação sobre a Exposição de Trabalhadores e Trabalhadoras ao Sars-CoV-2 no Brasil. Essa Rede de Informações e Comunicação busca contribuir com a produção e a disseminação de informações sobre o enfrentamento da pandemia, divulgando normas e orientações de prevenção à saúde dos(as) trabalhadores(as) que estão exercendo atividades presenciais em diversos ramos produtivos durante a pandemia. Simultaneamente, a Rede desenvolveu instrumentos de registro da situação de exposição desses(as) trabalhadores(as), pela ação interinstitucional das unidades de ensino e pesquisa, serviços e a representação da sociedade civil organizada. As ações integradas de informação e comunicação têm o propósito de articular saberes, práticas e políticas públicas com o objetivo de fortalecer a Política Nacional de Saúde do Trabalhador e da Trabalhadora e ações direcionadas à promoção da saúde em populações expostas ocupacional e ambientalmente ao Sars-CoV-2.

PALAVRAS-CHAVE Saúde do trabalhador. Exposição ocupacional. Comunicação. Covid-19. Brasil.

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Introduction

The pandemic caused by Sars-CoV-2 presents itself as one of the biggest health challenges of this century. Caused by a new type of coronavirus, Covid-19 has been recognized as a severe, highly infectious and transmissible acute respiratory syndrome, more easily spread by exposure and direct contact with an infected individual¹. Currently, a study² on the evidence of hypercoagulation in the disease proposes that Covid-19 be classified as thrombotic viral fever.

Regarding the population impacts of the pandemic, until April 14, 2021, 137,852,958 cases of Covid-19 were confirmed in 192 countries³. In Brazil, 13,673,507 cases were confirmed up to the same date and a mortality rate of 171.11 per 100,000 inhabitants³ was verified.

Since the beginning of the transmission of the new coronavirus, in December 2019, in Wuhan, China, data already showed the centrality of occupational and environmental exposure, when it was found that, of the 47 infected cases, 55% were workers or contact of these, and/or had interaction in the same work environment⁴. On January 30, 2020, the World Health Organization (WHO) declared the Covid-19 outbreak a public health emergency of international concern⁵. As of the end of February 17, 2020, 72,436 cases of Covid-19 have been confirmed in mainland China, including 1,868 deaths⁶, period in which the temporal dynamics and spatial spread of the disease were pointed out, making it crucial to inform policies and communicate intervention strategies in real time, not only for China, but also for other countries with Covid-19 transmission⁷.

The long period of the Covid-19 pandemic and the scientific investigations have demonstrated important discoveries about the virus and its health effects, as well as the complexity that involves health care in its clinical, biological and assistancial aspects, presenting a set of challenges to be faced⁸. Among them, the structuring of public policies and coping strategies with effective responses to the demands presented by the productive sectors, in order to guarantee maximum protection to the health of workers, as well as safety in the work environments⁹. In Brazil, this pandemic reveals historical situations of neglect of public policies, including the underfunding of the Unified Health System (SUS), science, technology and public universities, in addition to the devaluation of work and workers¹⁰.

As Covid-19 spreads in territories, the importance of reliable information and public health communication, as well as health surveillance of the worker, grows for the characterization of risk, morbidity and mortality and their relationship with the environments and work processes¹¹, and a greater understanding of the transmissibility of the disease – considering that workers in public services and essential activities, indispensable to meet the urgent needs of the population¹², are prevented from maintaining social distancing measures.

Another challenge presented by the current pandemic has been the growing number of information associated with Covid-19, not always accurate, disclosed daily by official media or social networks¹³, in addition to online and offline interactions, which make it difficult to find reputable sources and genuine guidelines for making safe decisions about mitigating health risks¹⁴.

In this scenario, the phenomenon called 'infodemia'¹⁵ has stood out – understood as the mass dissemination of fake news and rumors that compromise the credibility of official explanations based on scientific support¹⁵. Thus, in addition to the Covid-19 pandemic, workers and their union representatives have to face the challenge of an epidemic of misinformation. Such a phenomenon can be even more difficult to address when health communications and information are embedded in political narratives and online commentary not based on facts and verifiable evidence.

In view of this, increasing the level of adequate information, as well as amplifying it to the set of workers, productive segments and Brazilian society, constitutes a strategy to face the Covid-19⁹ pandemic. It is understood that popularizing recommendations for health control and protection, as well as producing quality information, is a basic communication strategy and presents itself as an important tool for protecting and promoting the health of workers on the fronts of essential activities, thus contributing to the strengthening of health surveillance actions and the adoption of sanitary measures in work environments.

Faced with the need for agile actions, the Information and Communication Network on the Exposure of Workers to Sars-CoV-2 in Brazil (Workers & Covid-19 Network), was designed by researchers/academics and health, work and environment professionals; with the participation of union, social movements and managers of the health sector. It is characterized as a research project that combines the ability to collect data, produce and communicate useful information, providing relevant evidence to those who need it. It is structured by the incorporation of Information and Communication Technology (ICT) instruments, essential for the development of communicative practices; interoperability and sharing of information and data; with greater monitoring and community participation, whether they come from class associations, unions, teaching and research institutions or government bodies.

This construction is based on the concept of communication in health outlined by Araújo and Cardoso¹⁶ as a socio-discursive space of a symbolic nature, continuously updated by specific contexts, formed by theories, models and methodologies, agents, institutions, policies, discourses, practices, struggles and negotiations, as well as educational instances.

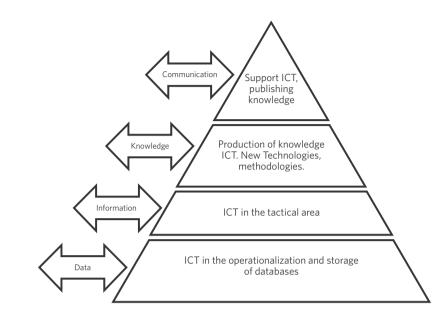
In this context, the Workers & Covid-19 Network aims to amplify technical and theoretical-scientific information for workers, their union representatives and employers aiming to control the disease or at least mitigate its impact, sharing experiences and enhancing actions in the health sector through the integration of different networks: researchers; social movements; health services; workers. The representative bodies of the workers present themselves as catalysts and systematizers for the recording of information from the different branches and professional categories, formal and/or informal in whatever their work relationships is, in order to inform the health and work conditions in which the different production processes are carried out.

The Workers & Covid-19 Network sought to organize a proposal for a network as a socio-discursive space, envisioning health communication as a strategic thematic field for decision-making, and a space for broad and consistent network training, for grounded intervention in the integrated development of agile and effective technologies resulting from actions, studies and research that guide health practice and contingency plans to be adopted in work environments.

From this perspective, the objective of this article is to present the partial results, potentialities and reflections on the implementation of the Workers & Covid-19 Network.

Experience report

The Worker(as) & Covid-19 Network has as its study population all workers in essential services and activities listed in Decree No. 10,282, of March 20, 2020¹². Thus, with this population profile and the emerging needs for collective protection, this project was conducted on three main axes: publication of information and communication instruments; expansion of communication channels with union entities and health services; research on the exposure of workers to Sars-CoV-2; organizing ICT for responses to the health emergency of the Covid-19 pandemic in Brazil.





Source: self elaborated.

The reconstruction of the actions and the analysis of the results presented in this experience report were collected from the review of documents and reports of the project in progress, in national and international publications, on union entities' websites, in addition to the authors' experience in the field of worker's health, from May 2020 to March 2021. Thus, the following sections refer to the actions developed by the Network.

Information as a health protection and promotion strategy in populations occupationally and environmentally exposed to Sars-CoV-2

The first product to be produced was the creation of a section 'Coronavirus and Occupational Health' within the Portal of the Sergio Arouca National School of Public Health (Ensp), which contains the publications as well as journalistic materials produced.

The 'Coronavirus and Worker's Health' section features informative content about the world of work and Covid-19. Until March 2021, 29 reports were published in this section for various professional categories. The second section, entitled 'Sars-CoV-2 Information Communication', presents special informational content for the Network project, including the bulletins produced and the digital questionnaire. Its development and creation were structured by the concept of information architecture¹⁷, reflecting the adoption of a user-centered design and data organization planning for responses to the health emergency of the Covid-19 pandemic in Brazil.

In order to popularize safety control and health protection recommendations for workers in different productive sectors, prevented from practicing social distancing, the Workers' Network & Covid-19 published, until March 2021, six reports with translation of international articles and guidelines from the WHO and the Occupational Safety and Health Administration (Osha/USA) on exposure to Sars-CoV-2 in work environments. These reports were indexed in the institutional repository of Fundação Oswaldo Cruz – Fiocruz-Arca, with open access to knowledge, so that they can be freely accessed by workers, union representatives, employers, researchers and society in general.

Table 1. Reports produced by the Workers & Covid-19 Network

Report	Publication	Target Audience	Theme
1	13/05/2020	All workers and workers	Work as a determinant of exposure to the virus and the risk classification of occupational groups exposed to Sars-CoV-2.
2	06/07/2020	Workers in the oil and gas sector	Mortality by the new coronavirus in the working class, ad- dressing that the analysis of occupation, characteristics of this segment and mortality by Sars-CoV-2 help in understanding the greater probability of exposure.
3	17/17/2020	Rural area workers	Presentation of action models for the protection of rural work- ers, since, in agriculture, the main challenges for the reduction of Covid-19 are housing and transport shared by rural profes- sionals.
4	04/08/2020	construction workers	Safety recommendations and standards, presenting guide- lines for several areas, such as engineering control measures, administrative control measures, use of masks in construction and safe work practices.
5	14/08/2020	Workers in the oil and gas sector	Suggestion of carrying out a risk assessment, to analyze the activities that have greater contact and develop measures to protect workers. In addition, the document suggested post- poning non-core activities that pose a high risk of exposure.
6	27/01/2021	Employers and workers in the meat processing and slaughtering industry	Publication of interim guidance prepared by Osha and the Centers for Disease Control and Prevention (CDC/USA).

Source: self elaborated.

It is noted that the first report was released on May 13, 2020, approximately two months after the declaration of the Covid-19 pandemic by the WHO¹⁸. This speed in the dissemination of quality information is of paramount importance, given that the infodemic can aggravate the ongoing pandemic. Several factors can lead to this aggravation, such as the difficulty in accessing reputable sources and reliable guidance, the overload and/or emotional exhaustion arising from misinformation, the direct impact on decision-making processes and the lack of quality control of what is published, considering that anyone can publish anything¹⁹.

The publication of the reports integrates a structure for coping with infodemics in the worker's health. Therefore, it is possible to point out some positive implications: i) the reports were prepared from verifiable theoretical and technical-scientific material, translated for the social appropriation of knowledge and gathered in an institutional repository, thus allowing easy access and informed decision-making on how to protect oneself and others collective of workers;

ii) knowledge is transculturally translated, adapted to colloquial language and domestic legislation, so messages are presented in a way that is easily understood, accessible by workers in the productive segments for which the recommendations/guidelines/ articles were directed. In other words, ensure that information concerns/demands are understood;

iii) considering the above implications, the reports are able to communicate and amplify the impact of good information, favoring intervention strategies in situations of risk to the health of workers, in work processes and environments, having the set of workers as protagonists.

It is understood that both the exercise of work activities and working conditions are potential sources of exposure to the virus. In turn, these loci – the work situation – are the territory for the spread of the disease²⁰. Thus, it is essential to understand how activities, the production process and working conditions can contribute to the increase in exposure to Sars-CoV-2 and its spread, and, above all, to the establishment of strategies to face the pandemic²¹.

Promotion of communication channels with workers, unions and health services

With a view to implementing actions to promote the use of the Workers & Covid-19

Network and to contribute to the strengthening of the collective identity of workers who perform essential activities and their union representations, the Network has been articulating and publishing with different trade union organizations, associations, federations and confederations.

On July 31, 2020, the Study Center Miguel Murat de Vasconcellos da Ensp (Ceensp) held a meeting on the theme 'The scenario of Workers' Health in the oil sector in times of pandemic', with the participation of representatives of two major unions in the oil category in Brazil: the Unified Federation of Oil Workers and the National Federation of Oil Workers. The online meeting was broadcast on Ensp's YouTube channel (<u>https://www. youtube.com/watch?v=rul5tT4lf3s</u>) and on the Facebook page of Sindipetro AM and Sindipetro PE/PB.

Several meetings were held with unions in the oil, slaughterhouse, sanitation, among others, to integrate the project and report on the risk situation of exposure to Sars-CoV-2 in work environments. Seminars, meetings and interviews were also held with researchers, representatives of the Public Ministry of Labor (MPT) and workers, in addition to the preparation of technical-scientific opinions.

Regarding the guidelines to support decision-making in the MPT's lawsuits, it is important to highlight that the preparation of the opinion had, initially, the objective of clarifying the questions about the interpretations of the use and results of the tests for the purpose of standardization and adoption of conducts in work relationships. Its scientific basis involved aspects about the proper use of the tests, the types and periods for defining the choice of RT-PCR and serological tests, as well as their respective interpretations for the purpose of removal and/or return to work in-person²².

The opinion was essential to mitigate transmissibility, especially because, in this period, positions without scientific basis were intensified, on the part of employers, for the application of testing as a criterion for the immunity passport. This opinion supported the MPT in its response to Petrobras' Technical Note 28/2020 on the strategy of using the IgG/IgM rapid test for asymptomatic individuals, in ground workers (refineries), health professionals, as well as for screening workers at airports, ports and land boardings²².

In addition to this technical-scientific opinion, two other opinions officially requested by the MPT^{23,24} were also prepared. The first on contamination by Covid-19 on platforms and contributions to the investigation of the characterization of the causal link between the disease and work in the oil and gas sector; and the second containing recommendations and descriptions of safety and health standards related to work in the oil and gas industry to prevent and face the Covid-19 pandemic.

News and information about the Workers' Network & Covid-19 were also released on the electronic addresses of different unions and associations (*table 2*). These communication channels of workers' representative entities aim to aggregate and mobilize the different professional categories, having a greater potential for reach, since they are more accessed by the members of the categories.

Table 2. Publication about the Workers & Covid-19 Network

Date	Union/Organization		
2020			
8/5/2020	Federal Nursing Council		
8/18/2020	Sindipetro - Oil Workers Union of Caxias		
8/18/2020	Sindipetro - Oil Workers Union of RJ		
10/30/2020	Sindipetro - Oil Workers Union of Norte-Fluminense		
11/3/2020	FUP - Federação Única dos Petroleiros		
11/4/2020	Sindipetro - Oil Workers Union of RS		
11/5/2020	Sindipetro - Oil Workers Union of São Paulos's Coastline		
11/10/2020	Seesp – Oil Workers Union of SP		
12/2/2020	APCEF - Workers of Caixa Econômica Federal's association - RS		
12/6/2020	CNTA - National Confederation of Workers in the Food and Related Industries		
12/18/2020	Sindifars – Union of Pharmacists of RS		
	2021		
1/6/2021	Union of Workers at Gas Stations in Bahia		
1/11/2021	FNP -National Federation of Oil Workers		
1/18/2021	FNP - National Federation of Oil Workers		
2/08/2021	Paulista Public Health Association		
2/10/2021	Sindinutri –Union of Nutritionists of the State of São Paulo		
2/25/2021	CUT - Confederation of Workers in the Municipal Public Service		
2/26/2021	Sindifars -Union of Pharmacists of RS		
2/26/2021	Sinbospa – Union of Fuel Resale Stations of BA		
3/3/2021	Sindipetro - Oil workers Union - RJ		

Source: self elaborated.

It can be said that the involvement of workers has been increasing over time, however, there is still a long trajectory of mobilizations and articulations to be covered.

Broadcasts on YouTube and Facebook as a way of mobilizing the categories have been important tools for dissemination and communication of the Network. An example of this practice was the online event 'Conversation with the category – Covid-19 cases at Petrobras according to the Fiocruz report', held on October 20, 2020. The event was broadcast live on the National Federation of Oil Workers's Facebook page and ten other unions in different regions of the country, obtaining more than 900 views.

The launch of the digital questionnaire, through an online event held on November 5, 2020, also reached a significant number of views (519), being an important ally in the dissemination of the Network's data collection instrument.

In addition to the disclosures on union and class bodies pages, the Network has been making a wide dissemination of documents on the Ensp portal. In all, 2 sections were created, 6 reports, 4 manuals/technical opinions and 15 news articles were published.

Risk communication tool

Among the information-related actions performed by the Network, the collection of information is included, through an online questionnaire²⁵, considering questions regarding workers exposed to, or infected by, Sars-CoV-2; occupational and sociodemographic information; risk perception; health and safety conditions in work environments, among others.

To carry out this data collection, which is one of the actions developed by the Network, the research project 'Information and Communication Network on the Exposure of Workers to Sars-CoV-2 in Brazil' was submitted to the Ethics Committee in Research at Ensp and approved according to Opinion CEP/Ensp/Fiocruz, No. 4,329,071.

This instrument is completed by workers, upon invitation made by organizations representing civil society that make up the Network and that have the role of articulating the different occupational categories, in many cases prevented from exercising the measure of distancing social security, in accordance with Decree No. 10,282, of March 20, 2020¹².

The data collection instruments that were developed considered aspects related to remote work and in-person work. For this, one of them was elaborated from the conception of structure by thematic area, and the other followed the organization of the blocks by guiding questions, considering the thematic areas. The in-person work questionnaire is organized into 11 thematic divisions, and the remote work questionnaire is organized into 8 guiding questions (work organization - risk perception). Its objective is to generate a database with contributions from different workers' health actors and also to establish interconnections with other sites of interest to the Covid-19 surveillance area, with the objective of informing for action, giving visibility to the projects developed in the educational and research institutions, providing greater capillarity to interventions in the workplace, by workers and services responsible for serving the population and caring for those infected and symptomatic of Covid-19.

The stages of questionnaire elaboration involved the search and analysis of other instruments and documentation related to the topic, creation of an original instrument, protocol, data dictionary and qualification of questions by specialists and workers from the union base. The qualification of the instrument took place in two processes – direct analysis of the issues and by listening to the workers (focus group).

The validation of the questionnaire was carried out with a group of workers from the

Federal Justice Union in Rio Grande do Sul, based on listening to focus groups of the category, organized by the union's health advisory team, and meetings with the project team. It was also submitted to the representatives of the workers that make up the Union Nucleus of Support to the Project, that made several suggestions for adjustments to the instrument.

The questionnaire was accessed by 2,133 workers (261 records in the test phase and 1,872 after launch), in the period from November 5, 2020 to March 2021. Of this total of 1,872, 35% partially answered the questionnaire questions, and 27% completed all 164 fields of the questionnaires, guaranteeing 100% completeness of the variables. Of the 637 workers who answered the field of economic activity, the ones with the highest records were from the human health and social services group (22%), transport, storage and mail (12%), other service activities (9.9%), industry (8.6%) and education (8.5%); and the productive sector with the lowest registration was art, culture, sport and recreation (0.5%). The branches without records, so far, were domestic services and information and real estate activities.

Final considerations

The experience report of these first months of implementation of the Workers & Covid-19 Network (the publication of reports started in May/2020 and the collection of primary data, in June/2020) sought to present the partial results, potentialities and reflections about this project. Reflections on ongoing projects contribute to critical analysis and realignment of actions, bringing us closer to understanding not only the challenges, but also the potentialities to be explored.

We highlight the pioneering spirit of the project in the country, whose target audiences are workers who are not on the 'front line' of the fight against Sars-CoV-2, but who are on different work fronts to ensure sustainability, functioning of society and the basic needs of the population, exposing themselves daily to this virus in times of social distancing recommendation.

It is observed that the Workers & Covid-19 Network has been achieving the objective of contributing to the production and dissemination of reliable information to face the current pandemic and the infodemic, disseminating recommendations and guidelines to protect the health of workers who are in essential activities, In addition, the members of the Network articulated themselves – integrating with the other actors in the area of workers' health – in a timely manner in the face of the global emergency declared by the WHO.

One of the main challenges posed to the components of the Network was to build an environment that presupposes principles of autonomy, democracy, ethics, horizontality and decentralization, emerging from spaces of partiipation^{26,27}, constituted by each of these points of the Network and their interrelationships to consolidate a single communication harmony and actions to protect the health of workers. For its effectiveness, it was essential to carry out data and documents survey work, with careful selection and evaluation of scientific quality.

Another challenge is the continuous mobilization and adhesion of workers in the constitution of the network and in the completion of the questionnaire, in a growing process of participation for the due knowledge of the magnitude of the exposure, capable of producing robust statistical analysis, in view of the universe of workers involved. However, intersectoral articulations and with representatives of professional segments are taking place to increase the dissemination of the importance of recording the exposure history of workers and their consequent adhesion.

Among the potentialities of the implementation of the Worker & Covid-19 Network, we highlight the ability to create essential tools to guide contingency plans in the work environments and the strengthening of the National Policy on Worker's Health in this very challenging scenario – as well as the creation of instruments to record the exposure situation of these workers, the publication of informative material for employers and workers and the intersectoral articulations that have been taking place with a view to subsidizing managers and representatives of the organized civil society with the best guidelines and contingency plans for work environments.

In this way, the Network favors the visibility of these workers and their working conditions during the pandemic, seeking, through scientific evidence, to emphasize the need to prioritize the exposure criterion in the organization of risk groups for vaccination and, consequently, contribute to mitigation strategies for the transmission chain in productive territories and their interconnections.

Finally, it highlights the importance of communication for ensuring access to reliable information by all actors involved in this process: managers, workers, employers, researchers and society as a whole.

Collaborators

Nunes CH (0000-0002-1663-9445)* contributed to the design, critical review of the content and writing. Cavalcante ALM (0000-0002-2338-6060)* contributed to the design, analysis and interpretation of data, critical review of intellectual content and writing. Campos AS (0000-0003-0166-3482)* contributed to the design and writing. Cozendey-Silva EN (0000-0003-4093-4732)* contributed to the design, writing and critical review of the manuscript's intellectual content. Mattos RCOC (0000-0002-0523-7467)* contributed to the design, analysis and interpretation of data, critical review of intellectual content and writing. Moura-Correa JM (0000-0002-9406-3955)* contributed to the design and writing. Teixeira LR (0000-0003-2460-0767)* contributed to the design and writing.∎

References

- World Health Organization. Coronavirus disease 2019 (Covid-19): situation report, 72. Genebra: World Health Organization; 2020. [acesso em 2021 abr 4]. Disponível em: <u>https://apps.who.int/iris/handle/10665/331685</u>.
- Costa-Filho RC, Castro-Faria-Neto HC, Mengel J, et al. Should Covid-19 be branded to Viral Thrombotic Fever? Mem Inst Oswaldo Cruz. 2021 [acesso em 2021 abr 4]; 116:1-27. Disponível em: <u>https://memorias.ioc.</u> <u>fiocruz.br/article/10804/0552-should-covid-19-be-</u> <u>-branded-to-viral-thrombotic-fever.</u>
- Johns Hopkins University. Coronavirus Resource Center. 2021. Mortality in the most affected countrie. c2022. [acesso em 2021 abr 4]. Disponível em: https://coronavirus.jhu.edu/data/mortality.
- Li Q, Guan X, Wu P, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. N Engl J Med. 2020 [acesso em 2021 abr 4]; 382(13):1199-1207. Disponível em: <u>https://www.nejm.org/doi/full/10.1056/nejmoa2001316</u>.
- 5. World Health Organization. Statement on the second meeting of the International Health Regula-

*Orcid (Open Researcher and Contributor ID).

tions (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV). Genebra: WHO; 2020. [acesso em 2021 abr 4]. Disponível em: <u>https://www.who.int/news-room/ detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)--emergency-committee-regarding-the-outbreak-of--novel-coronavirus-(2019-ncov).</u>

- National Health Commission of the People's Republic of China. Latest developments in epidemic control on Feb 18 (2). 2020. [acesso em 2021 abr 4]. Disponível em: http://en.nhc.gov.cn/2020-02/18/c_76690.htm.
- World Health Organization. Coronavirus disease 2019 (Covid-19) situation report-47. Genebra: WHO; 2020. [acesso em 2021 abr 4]. Disponível em: <u>https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200307-sitrep-47-covid-19.</u> <u>pdf?sfvrsn=27c364a4_2</u>.
- Helioterio MC, Lopes FQRDS, Sousa CCD, et al. Covid-19: Por que a proteção de trabalhadores e trabalhadoras da saúde é prioritária no combate à pandemia? Trab. Educ. Saúde. 2020 [acesso em 2021 abr 4]; 18(3):e00289121. Disponível em: <u>https://www.scielo. br/pdf/tes/v18n3/0102-6909-tes-18-3-e00289121.pdf</u>.
- Garzillo EM, Monaco MGL, Spacone A, et al. SARS--CoV-2 emergency in the workplace: are companies ready to protect their workers? A cross-sectional survey. Int J Occup Saf Ergon. 2020 [acesso em 2021 abr 4]; 1-8. Disponível em: <u>https://pubmed.ncbi.nlm.nih.gov/32787512/</u>.
- Cueto M. Covid-19 e as epidemias da globalização. Hist. Ciênc. Saúde-Manguinhos. 2020. [acesso em 2021 abr 4]. Disponível em: <u>http://www.revistahcsm.</u> <u>coc.fiocruz.br/o-covid-19-e-as-epidemias-da-globalizacao/.</u>
- Brasil. Ministério da Saúde. Portaria nº 1.823, de 23 de agosto de 2012. Institui a Política Nacional de Saúde do Trabalhador e da Trabalhadora. Diário Oficial da República Federativa do Brasil. 24 Ago 2012. Seção I, p. 46-51.

- 12. Brasil. Decreto nº 10.282, de 20 de março de 2020. Regulamenta a Lei nº 13.979, de 6 de fevereiro de 2020, para definir os serviços públicos e as atividades essenciais. Diário Oficial da República Federativa do Brasil. 21 Mar 2021.
- Galhardi CP, Freire NP, Minayo MCDS, et al. Fato ou Fake? Uma análise da desinformação frente à pandemia da Covid-19 no Brasil. Ciênc. Saúde Colet. 2020 [acesso em 2021 abr 4]; 25(2):4201-4210. Disponível em: <u>http://www.scielo.br/scielo.php?script=sci_</u> arttext&pid=S1413-81232020006804201&lng=en.
- Organização Pan-Americana da Saúde. Understanding the Infodemic and Misinformation in the fight against Covid-19. Evidence and Intelligence for Action in Health (Washington, D.C.). 2020 [acesso em 2021 abr 4]; 5. Disponível em: https://iris.paho.org/ handle/10665.2/52052.
- Zarocostas J. How to fight an infodemic. Lancet. 2020 [acesso em 2021 abr 4]; 395(10225):676. Disponível em: https://www.thelancet.com/action/ showPdf?pii=S0140-6736%2820%2930461-X.
- Araújo ISD, Cardoso JM. Comunicação e saúde. Rio de Janeiro: Fiocruz; 2007.
- Roselena L, Morville P. Information architecture for the World Wide Web. 2. ed. Sebastopol: O'Reilly; 2002.
- World Health Organization. WHO Director-General's opening remarks at the media briefing on Covid-19

 11 March 2020. Genebra: WHO; 2020. [acesso em 2021 abr 4]. Disponível em: https://www.who.int/ dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19----11-march-2020.
- Organização Pan-Americana da Saúde. Entenda a infodemia e a desinformação na luta contra a Covid-19. [Local desconhecido]: OPAS; 2020. [acesso em 2021 abr 4]. Disponível em: https://iris.paho.org/bitstream/handle/10665.2/52054/Factsheet-Infodemic_por.pdf?sequence=14&isAllowed=y.

- 20. Baker MG, Peckham TK, Seixas NS. Estimating the burden of United States workers exposed to infection or disease: a key factor in containing risk of Covid-19 infection. PLoS One. 2020 [acesso em 2021 abr 4]; 15(4):e0232452. Disponível em: https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/covidwho-133621.
- Jackson Filho JM, Assunção AA, Algranti E, et al. A saúde do trabalhador e o enfrentamento da Covid-19. Rev bras saúde ocup. 2020 [acesso em 2021 abr 4]; 45:e14. Disponível em: https://www.scielo.br/j/rbso/a/Km3d DZSWmGgpgYbjgc57RCn/?lang=pt.
- 22. Castro HA, Mattos RC, Teixeira LR, et al. Nota para Ministério Público do Trabalho. Reflexões sobre testes para Covid-19 e o dilema do passaporte da imunidade. 2020. [acesso em 2021 abr 4]. Disponível em: https://www.arca.fiocruz.br/bitstream/icict/45011/2/ TestesCOVIDPasspImunidade.pdf.
- 23. Larentis AL, Silva ENC, Albuquerque HC, et al. Parecer sobre contaminações por Covid-19 a bordo de plataformas e contribuições para investigação da caracterização do nexo causal entre a doença e o trabalho no setor de petróleo e gás. 2020. [acesso em 2021 abr 4]. Disponível em: https://www.arca.fiocruz.br/bitstream/icict/44058/2/Recomeda%C3%A7%C3%B5esIndPetroleoGas.pdf.

- 24. Cavalcante ALM, Larentis AL, Silva ENC, et al. Recomendações e descrições dos padrões de segurança e saúde relacionados ao trabalho na Indústria de Petróleo e Gás para prevenção e o enfrentamento da pandemia pela Covid-19. Rio de Janeiro: Fiocruz; 2020. [acesso em 2021 abr 4]. Disponível em: https:// www.arca.fiocruz.br/handle/icict/44058.
- 25. Fundação Oswaldo Cruz. Questionário Online. Rede de Informações e Comunicação Sobre a Exposição de Trabalhadores e Trabalhadoras ao SARS-CoV-2 no Brasil. Rio de Janeiro: Fiocruz; 2020. [acesso em 2021 abr 4]. Disponível em: https://redcap.ensp.fiocruz.br/surveys/?s=XMTY7LLPCC.
- 26. Breilh J. Epidemiologia crítica: ciência emancipadora e interculturalidade. Rio de Janeiro: Fiocruz; 2006.
- Breilh J. De la vigilancia convencional al monitoreo participativo. Ciênc. Saúde Colet. 2003 [acesso em 2021 abr 4]; 8(4):937-951. Disponível em: http://www. scielo.br/scielo.php?script=sci_arttext&pid=S1413--81232003000400016&lng=en.

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