Permanent health education actions in pandemic times: priorities in state and national contingency plans

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Abstract Objective: to assess permanent health education actions regarding the national and state contingency plans to face the COVID-19 pandemic in Brazil. Method: documentary research, using 54 plans in the initial and final versions, published between January 2020 and May 2021. The content analysis included the identification and systematization of proposals aimed at training and reorganizing the work process, as well as physical and mental health care of health workers. Results: the actions were focused on training workers with an emphasis on flu syndrome, infection risk control measures and knowledge about biosafety. Few plans addressed the teams' working hours and work process, promotion and assistance to the workers' mental health, mainly in the hospital environment. Conclusion: the superficiality regarding the approach to permanent education actions in contingency plans need to include actions in the strategic agenda of the Ministry of Health and State and Municipal Health Secretariats, with the qualification of workers to face this and other epidemics. They propose the adoption of health protection and promotion measures in daily health work management within the scope of the SUS.

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Introduction

The COVID-19 pandemic has become the biggest challenge faced by the world's health systems since the first cases appeared in China in 2019¹. In Brazil, the epidemic started in the first months of 2020, so that, in March 2020, the Public Health Emergency of National Importance (ESPIN, *Emergência em Saúde Pública de Importância Nacional*) was declared, triggering the planning of strategies to face the pandemic in the federal, state and municipal levels².

The Ministry of Health (MoH), through the Health Surveillance Secretariat, launched the National Contingency Plan for Human Infection by the new Coronavirus – COVID-19, an instrument that guides the creation and response strategies at three levels, including early detection actions, isolation, epidemiological surveillance, prevention and control measures and assessment of health impacts³.

Among the planned actions, Permanent Health Education (PHE) has become a strategic one, given its importance for adapting and improving the health workers' performance when coping with COVID-19^{3,4}. In fact, the PHE actions enhance the reflection on the work process, shared and participatory management, identification of changes necessary to practices, and makes local realities an object of individual, collective and institutional learning⁴.

The pandemic scenario brought impacts to the provision of care, as a result of the need for immediate action in the control and prevention of a disease of little known etiology, at first. In this sense, initial studies on the pandemic showed concern regarding educational interventions to guide the procedures to be adopted aiming to avoid contamination, as a guiding action for the alignment of the teams' work processes, considering the changes in the operational protocols of health care services^{5,6}.

The reviewed articles highlight that the professionals were not prepared to act in the face of COVID-19. Studies carried out in different countries, such as China, highlight, for instance, the importance of training physicians to work in Intensive Care Units (ICUs)⁷.

Hence, the training and organization of the workforce became essential, since health workers are responsible for ensuring qualified care that meets the population's health needs^{8,9}. As Pinto and Paim⁶ warn, it is necessary to qualify health workers as a fundamental measure for adapting services to face the pandemic, which also implies the reorganization of other care activities.

In Brazil, there are currently around 3.5 million health workers directly or indirectly involved in providing services at the different levels of care in the Unified Health System (SUS, Sistema Único de Saúde), as well as in private sector establishments. A significant part of this workforce has been working on the front lines of the fight against the pandemic caused by the new Coronavirus, SARS-CoV-2, particularly in the hospital environment, and deserves to be the object of attention, both for their relevance in the direct care of cases of COVID-19, and for their exposure to the risk of infection¹.

It is worth mentioning the need to expand the health workforce to adequately respond to the services' needs, providing an ideal number of health workers, a fact that produces another need: training to assume new duties imposed by the pandemic scenario¹⁰. For that purpose, a set of priorities must be considered in the creation of the government's strategic agenda, such as paying attention to the risk of workers' contamination, the need to readjust work processes, and the training of professionals who work caring for patients with suspected or confirmed COVID-19 infection.

Moreover, healthcare institutions must offer support to healthcare workers in fulfilling their responsibilities, aiming at protecting the health of the workforce. Therefore, effective management allows the health system to have better health outcomes, a health care system capable of meeting the population's needs in a timely manner, greater efficiency in the use of physical and material resources, and reduction of fears and stress in the health care team in the face of constant changes in care practices¹⁰.

Aiming at encouraging reflections on the planning of the Brazilian response to the pandemic, the objective of this study is to analyze the actions of Permanent Health Education as defined in the National and State Contingency Plans for COVID-19 in Brazil.

Theoretical methodological procedures

This is a documentary research that used 54 Contingency Plans (CP) for COVID-19 as sources of information, of which the first and last versions were prepared by the Ministry of Health (two versions), State Health Secretariats (26 initial versions and 24 final versions, as the states of Sergipe and Mato Grosso did not update their plans) and the Federal District (two versions).

These documents were accessed through the respective institutional electronic sites, electronically saved and identified as initial (I) and final (F) versions – respecting their editing dates between December 2020 and June 2021. Subsequently, they were read in full, identifying the following keywords: "workers", "health professionals", "health technicians", "education", "permanent education", "continuing education", "qualification" and "training".

The choice of these keywords took into account the different dimensions of the study object, that is, the educational actions aimed at health workers; therefore, it was a matter of including in the search the different terms that are used in official documents to refer to both the educational actions themselves – education, permanent education, continuing education, training and qualification – and the subjects of these actions – workers, health professionals, health technicians.

Therefore, it is worth calling attention to the theoretical-conceptual distinction between "Permanent education" and "Continuing education", which are terms that appear indistinctly in the documents, although they have different meanings. PHE has been defined as an educational action that analyzes the daily work or training in health, so that the production of knowledge takes place based on the reality experienced by the actors involved with it, with the problems faced and the experiences of these actors in the daily work routine to build coping strategies and changes^{4,11}. "Continuing Education", in turn, includes the activities that have a defined period for their performance and uses, for the most part, the assumptions of traditional education, such as the formal offers at postgraduate levels⁴.

Considering the scientific evidence found in international articles that identified the main problems affecting health professionals directly involved in fighting the pandemic¹, the categories of analysis of the content of the Plans were defined, so that the proposals contained in the plans were organized according to the following typology: a) preventive measures to reduce the risk of infection among workers; b). clinical monitoring of health professionals; c). reorganization of the work process with adaptation of the workday; d) professional training on biosafety standards; e) attention to the health workers' mental health.

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gy, Innovations and Communications", from the "Ministry of Health – MoH" and the "National Council for Scientific and Technological Development – CNPq". The methodological challenge was related to the variations of the topics addressed in the plans and the difficulty in locating them in the institutional electronic addresses of the Health Secretariats.

Results and discussion

The State and Federal District Contingency Plans are normative documents containing immediate recommendations, responsibilities, priorities and guidelines for the investment of resources. They were created by the coordination and departments of the Health Surveillance Secretariat (SVS, Secretaria de Vigilância em Saúde), subsidizing the organization, coordination and operationalization of the response to public health emergencies^{2,3} being notorious its importance as a planning instrument.

Structurally, the CPs are characterized by the multiplicity of formats, with initial and updated versions, resulting from the need to incorporate measures that were not planned at the beginning, but were identified as the knowledge about COVID-19 was acquired and revised. Thus, the analysis of their initial and final versions is justified.

As a guiding instrument for public policies, the Contingency Plans pointed out measures to face human infection by SARS-CoV-2, which included surveillance strategies, laboratory support, infection control measures, pharmaceutical care and assistance, health surveillance, risk communication and management. The possible permanent health education strategies could originate from the established objectives, especially the purpose of limiting transmission, including the reduction of secondary infections among close contacts of infected patients, as well as the guarantee of health care for health workers³.

What the Contingency Plans say about PHE actions

The National Contingency Plan does not comprise some actions recommended by the World Health Organization (WHO)¹⁰, such as calculating the resources needed to contain the occurrences of COVID-19 in the country and articulating multisectoral strategies to provide the necessary financial support, which are in-

cluded in the document "COVID-19: Operational Planning Guidelines to Support Country Preparedness and Response"¹². Therefore, we did not verify multisectoral strategies to provide the necessary financial support to contain the occurrences of COVID-19 in the country.

As for the direction of the state planning process, the National CP contains only recommendations that the states, municipalities and public and private health services should take note and prepare their respective CPs, leaving it to the health secretariats to prepare them. Therefore, the reading of the state CPs revealed a great heterogeneity and diversity of technical and methodological quality, which is certainly due to the fact that no technical note or guidance document was prepared regarding the mandatory and basic elements for the creation of the Plans.

The identification and classification of the proposals related to the PHE of the state CPs, according to the previously defined analysis categories, led to the creation of Chart 1.

The first group of proposals concerns measures to prevent and reduce the risk of infection in health workers, which was the most prominent category in the state CPs, as all CPs contained proposals like these, including the training of health professionals in the clinical management of the flu syndrome, focusing on the new coronavirus, which causes COVID-19, and guidelines on prevention and protection measures for workers aiming to avoid and reduce the risks of contamination.

It is clear, therefore, the double concern that guided the creation of these proposals, which comprises the need to train health workers to deal with a new disease, whose pathophysiology was still unknown, without having specific available treatment, whereas, given the evidence showing the high transmissibility of the virus, it was clear the urgent need to protect workers who directly cared for clinical cases.

Proposals related to training for the clinical management of patients were initially included in 11 of the 26 state CPs, a number that increased to 19 in the updated versions. The protection measures for health workers, on the other hand, consisted of only two state CPs in their initial versions, increasing to 16 in the updated versions of the Plans. As it can be observed, there was an important gap in the CPs of the states that did not incorporate these proposals.

Therefore, it is noteworthy the importance of including these proposals in the Plans to be periodically updated, in addition to the need to assess

the degree of implementation of these actions in the states, since the training of workers is essential to keep the teams updated on the measures to control the new cases of COVID-19, as well as on technical adaptations and reformulation of care protocols^{13,14}, as the knowledge and diagnostic and therapeutic technologies for COVID-19 progress. On the other hand, it is important that, in future studies, the degree of implementation of measures to protect workers be evaluated, given that when health workers become sick, they need to be removed from the service, in addition to compromising the amount of needed and available human resources to provide qualified care¹³.

The second group of proposals includes PHE actions aimed at reorganizing work processes, an aspect that was hardly developed in the analyzed documents, suggesting a low problematization of the work management in Contingency Plans. Only one state mentioned the guarantee of institutionalized spaces for PHE in the teams' daily lives, whether through meetings, forums and videoconferencing, in their initial and final version plans. And only two states prioritized interagency partnerships in their final versions of Contingency Plans.

This gap is noteworthy, as some studies have pointed out the importance of reorganizing the work process at different levels of care, particularly in the hospital environment, prioritized in the first moment when coping with the pandemic, which caused the rapid expansion of the number of beds and the hiring of personnel, starting with the creation of "field hospitals" intended exclusively for COVID-19 patients. The accelerated increase in hired personnel, as well as the need to guarantee the quality of care¹³, necessarily implied a reorganization of the teams' work process, with the workday readjustment, the implementation of online or in-person monitoring, the procedural realignment of care practices, the putting on and removal of PPE, in addition to organizational changes in Primary Health Care (PHC) to ensure access to, longitudinality and coordination of care¹⁵. The incipience and even the complete absence of proposals in this direction in the state CPs is certainly a matter of concern and should be the subject of debate in the State Health Secretariats, since the pandemic is still ongoing.

Understanding that health workers are directly exposed to the risk of contamination, the third group of proposals deals with **professional training on biosafety norms**, and included four recommendations: 1) the preparation and dis-

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Chart 1. Agenda of strategic priorities for permanent education in health in the National, State and Federal District Contingency Plans by Brazilian regions, 2021.

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Chart 1. Agenda of strategic priorities for permanent education in health in the National, State and Federal District Contingency Plans by Brazilian regions, 2021.

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Legend: I – initial; F – final source: National and State Contingency Plans for COVID-19, 2020-2021.

Source: Authors.

semination of informative texts on COVID-19 in health workers; 2) the training of workers to investigate suspected cases of human infection with the new coronavirus (2019-nCoV); 3) procedures to ensure the health and safety of workers during the handling and contact with substances that cause health problems, such as the situation caused by the SARS-CoV-2 virus; 4) health education strategies aiming at training professionals to guide the community

The analysis of the CPs revealed that, in the initial versions, 12 Plans included proposals for the preparation and dissemination of informative materials (texts, videos, booklets, etc.) on COVID-19 among health professionals and workers, a number that increased to 17 in the final versions. As for the training to investigate suspected cases of human infection with the new coronavirus (2019-nCoV), only eight of the 26 plans dealt with it in their initial versions, with another 5 including proposals of this type in their final versions, bringing the total to 13 CPs. Regarding the Biosafety measures and workers' health, 11 Plans included these proposals in their initial versions, whereas 20 of the CPs contained them in their final versions. Finally, regarding the health education actions aimed at professionals and the community, only 6 CPs included such proposals in their first versions, whereas 7 Plans included these proposals in their final versions.

Therefore, it seems that the concerns regarding the implementation of measures aimed at biosafety and workers' health were translated, primarily, into proposals related to the dissemination of educational material and recommendations regarding the use of Personal Protective Equipment (PPE). Nevertheless, these proposals were not included in all the state CPs, as 7 Plans did not even contain the proposal for the dissemination of educational material, and 4 CPs did not even include Biosafety and worker's health measures in their proposals. Moreover, we can observe the incipience with which training actions were considered for the investigation of new cases and educational actions with the community aimed at the dissemination of knowledge and protection measures against the virus, a strategy that was even recommended by some studies on the pandemic16.

The fourth group of proposals analyzed in the CPs concerns health workers' mental health care, mentioned only in four CPs in their final versions, dealing with the occurrence of symptoms of anxiety, depression and insomnia that have become more recurrent among health workers in

the context of the pandemic. According to studies carried out on the subject, these symptoms are related to the fear of transmitting the virus to family members¹, exhaustion due to long working hours and the effects of social distancing¹⁷, uncertainties brought on by the disease that were little known until then, and processes regarding the loss of colleagues and friends (mourning).

These conditions required the institutionalization of psychological support strategies and the strengthening of educational activities aiming to attenuate anxieties of occupational origin^{1,18}, which is why it is a matter of concern the fact that only four state CPs included activities such as these, which represents a significant gap in the work management developed by the State Health Secretariats. Finally, the last group of proposals that we aimed to identify in the CPs concerns the clinical monitoring of health professionals; however, this was not mentioned in any of the analyzed plans, either in their first or final versions. The absence of this proposal in the Contingency Plans may be disclosing the fragility of the health workers' health surveillance actions, responsible for the early detection of COVID-19 cases in this population group, which would support the adoption of monitoring measures for health professionals and workers who might be affected by the disease.

This monitoring should have been understood as necessary, as an extension of the actions aimed at the physical and mental health care of health workers, mainly to minimize the anxieties and risks of spreading the coronavirus. Thus, institutionally, the workers' safety¹⁹, clinical monitoring, the active search for respiratory symptoms and information on disease risk factors as PHE actions would contribute to facing the COVID-19 pandemic, just like social distancing²⁵ and contact tracing, necessary measures to increase the control of the pandemic¹².

Final considerations

The analysis of the 54 Contingency Plans for Human Infection by the new COVID-19 allowed identifying the proposals and recommendations of the managers regarding the Permanent Health Education actions, as well as their potentialities and limitations in the face of the pandemic scenario in the country and in each state.

We observed that the actions listed in the Plans were, as a priority, aimed at the permanent education of health professionals for the clinical management of the flu syndrome (FS), in parallel with the adoption of biosafety and workers' health measures, focused on the use of personal protective equipment, including for the cleaning staff, and personnel working in laboratories, ports and airports, aiming at reducing the risks of contamination, illness and death of workers who deal with suspected and confirmed COVID-19 cases on a daily basis.

It can be observed that, despite the methodological and content fragility, the CPs are still characterized as a management instrument, reflecting the structure and operation of the SUS as a system and the main option to face the health crisis. It should be noted, however, that the CPs, despite their importance and relevance, have limitations, since not everything that is written in them may have been put into use, and not everything that was put into use by the management and health services, are contained or stated in the several analyzed CPs.

In the specific case of PHE, the gaps identified in the CP were centered on the lack of actions focused on the promotion and protection of mental health and the clinical monitoring of health professionals, highlighting the need for the articulation between workers, systems, health services and the state Secretariats to assess health professionals, in their different categories and workplaces.

The absence of proposals aimed at health workers should be a cause for great concern and reason for debate on the investments that need to be assumed by health managers, both at the federal level and by the states and municipalities. The prioritization of workers in the organization and management of services is essential for the provision of care in the case of COVID-19 and

other pathologies and diseases, since health protection actions imply a smaller number of professionals on leave and, consequently, their availability to participate in PHE activities that aim to modify and create work processes to meet the demands and needs of health services.

Therefore, it is necessary for the government to prioritize the agenda of challenges related to health workers, especially now, when different forms of work flexibility have reached the health sector, leaving it in an increasingly precarious situation. Hence, it is necessary to emphasize that this agenda must include, in its presentation, the participation of workers and managers interested in the debate on the necessary changes in Work Management and Health Education, especially PHE actions. It is expected that the pandemic situation has highlighted the importance of workers for the adequate Unified Health System operation, and that the lessons thus learned will collaborate with the struggle to seek better working conditions for health workers and the SUS, who were considered heroes in the most difficult phases of the pandemic in Brazil and worldwide.

For that purpose, it is worth concluding by mentioning the contribution of the National Plan to Fight the COVID-19 Pandemic, prepared by the 'Front for Life' (FPV, *Frente Pela Vida*)¹⁸, the result of the contribution of organizations and movements that criticized the MoH's approach to the management of the pandemic in Brazil. The Plan points out the situation of vulnerability and epidemiological risk to which SUS workers were (and still are) exposed, and strongly recommends a series of protective measures for health workers, which can be used as a necessary subsidy for managers of the new government starting in 2023

Collaborations

SL Vieira, SG Souza, CF Figueiredo, VVC Santos, TBS Santos, JA Duarte, and ICM Pinto equally contributed to all stages of the manuscript, from its conception, methodology, and writing of the article. ICM Pinto contributed to all stages and to the final review of the manuscript.

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