

Mindfulness-Based Interventions for Healthcare Professionals throughout the COVID-19 Pandemic: a strategy for stress reduction and mental health care

Intervenções Baseadas em Mindfulness para Profissionais de Saúde na Pandemia de COVID-19: uma estratégia para redução do estresse e promoção de saúde mental

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ABSTRACT

The outbreak of COVID-19 triggered a serious global health crisis and the high levels of stress tend to compromise the entire population's mental health, in particular, the healthcare professionals which are exposed to additional stress factors. Objectives: To evaluate the evidence for the use of Mindfulness-Based Interventions (MBI) for stress reduction healthcare professionals during the context of the COVID-19 Pandemic. Methods: A search at PubMed and Google Scholar was conducted between April and July 2020 with the words: mindfulness, stress, health professionals, and COVID-19. Results: Mindfulness can subsidize for developing skills such as self-knowledge, self-reflection, self-care, and non-judgmental; it can also influence positively the perception and management of stressful demands by healthcare professionals. Conclusion: MBI may be configured as an important tool for stress reduction in healthcare professionals throughout the COVID-19 Pandemic and also be a good strategy for better maintenance of mental health state.

Keywords: Mindfulness; Healthcare Professionals; Stress; Coronavirus Infections; Mental Health.

RESUMO

Introdução: O surto da COVID-19 desencadeou uma grave crise sanitária de caráter mundial e o elevado nível de estresse tende a comprometer a saúde mental de toda a população, em especial dos profissionais de saúde, por estarem expostos a fatores adicionais de estresse. **Objetivos:** Avaliar as evidências para a utilização das Intervenções Baseadas em Mindfulness (IBM) na redução do estresse nos profissionais de saúde no contexto da Pandemia da COVID-19. **Metodologia:** Revisão literária utilizando os bancos de dados da PubMed e Google Acadêmico entre Abril e Julho de 2020 utilizando as palavras de busca: mindfulness, estresse, profissionais de saúde e COVID-19. **Resultados:** Mindfulness pode contribuir para o desenvolvimento de habilidades como o autoconhecimento, autorreflexão, autocuidado e não-julgamento, assim como influenciar positivamente na percepção e no manejo das demandas estressoras dos profissionais de saúde. **Conclusão:** As IBM configuram-se como ferramentas importantes para redução do estresse nos profissionais de saúde durante a Pandemia da COVID-19, sendo uma boa estratégia para manutenção da saúde mental.

Palavras-chave: Mindfulness; Profissionais de Saúde; Estresse; Infecções por Coronavirus; Saúde Mental.

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INTRODUCTION

THE COVID-19 PANDEMIC

In December 2019 in Wuhan (Hubei, China), the outbreak of a new pneumonia caused by a previously unknown type of coronavirus was identified and attracted worldwide attention. In February 2020, there were about 38,000 confirmed cases and approximately 29,000 suspected cases of coronavirus disease 2019 (COVID-19) in China. In March 2020 the World Health Organization (WHO) declared a Pandemic by the virus¹.

Throughout epidemic events, the high levels of stress can compromise an entire population's mental health state. The COVID-19 Pandemic triggered a major global health crisis. Health systems worldwide have been restructured and reorganized in an attempt to assemble the growing demand for medical care at different levels: outpatients, urgency, and emergency, in addition to intensive care units. Immersed in a scenario of extreme uncertainty, healthcare professionals have been mobilizing all their energy and effort to provide the necessary care to patients, which can also trigger several consequences to their mental health state. In addition to this situation, there is the fact that these professionals are exposed to stress factors related to the occupational activity: the need to make difficult decisions, such as screening patients; the therapeutic choices facing an illness previously unknown; coping with the grief resulting from successive losses of patients and colleagues; the greater risk of contracting the infection; the fear of transmitting the disease to a family member². It would be expected that the mental health state of health professionals become more vulnerable throughout this crisis.

METHODS

A search in the PubMed and Google Scholar databases was conducted between April and July 2020 with the words: mindfulness, stress, health professionals, and COVID-19, aiming to answer whether there is evidence for the use of Mindfulness-Based Interventions (MBI) for stress reduction and management in healthcare professionals during the context of the COVID-19 Pandemic. The inclusion criteria were articles written in Portuguese or English; year of publication from 2015 to December 2019; Mindfulness-Based Interventions to reduce stress symptoms in healthcare professionals. After analyzing the titles of 283 articles (International=37; National=246), 54 articles were selected (International=37; National=17) for abstract evaluation, resulting in 15 articles, as shown in Figure 1 and Table 1.

The concept of health promotion has been modified over time. Since the First International Conference on Health Promotion of the World Health Organization (WHO) in 1986, this concept was extended to a new public health context in which the main causes of diseases are related to lifestyle and the environment. In this particular context, the importance of stress stands out as a condition that is directly influenced by environmental factors, not only to the individual but also to the collective levels³.

More specifically the subgroup of healthcare professionals faces high levels of physical and psychological

stress, characterizing the professional burnout syndrome, also known as Burnout. In addition, those professionals are also at a greater risk of developing depressive and psychiatric symptoms when compared to the general population^{3,4}.

THE COVID-19 PANDEMIC AND STRESS

Few studies describe the prevalence of mental health disorders resulting from the COVID-19. On the other hand, psychiatric symptoms have been described in both patients affected by the disease, as well as in healthcare professionals who look out for these patients. The risk factors for developing psychiatric symptoms in healthcare professionals are frequently associated with increased contact with very ill patients; previous history of psychiatric disorders and/or other comorbidities; prolonged quarantine; lack of organizational support and social stigma with health care professionals. On the other hand, protection factors are also associated with access to individual protective equipment; supportive pairs; better access to psychiatric intervention; confidence in the institution; good communication skills, and adequate working hours⁵.

Cross-sectional studies with a population of physicians and nurses in China (n>1,200) and frontline health care professionals in Italy (n>1,300) evaluated the prevalence of psychiatric disorders through the application of questionnaires, identifying: post-traumatic stress disorder (PTSD) in 35 to 49%; depression in 15 to 25%; anxiety in 12 to 20% and insomnia in 8% of participants⁵. In addition, a British meta-analysis demonstrated a significant presence of symptoms of insomnia, anxiety, and depression in, respectively, 38.9%, 23.2%, and 22.8% of the health care professionals during the COVID-19 Pandemic. Differences related to gender and occupation were identified, with women and nurses being more affected than men and physicians⁶.

MINDFULNESS AND STRESS REDUCTION

Mindfulness can be defined as the state of consciousness that emerges when we pay full attention to the present moment intentionally, with curiosity, and without judgement⁷. More recently, special attention has been given to the study of Mindfulness mechanisms of action, which are probably related to a moderating effect between stressors and the individual's wellbeing³

The effectiveness of Mindfulness-Based Interventions (MBI) has been established by numerous scientific studies in recent decades, including the Mindfulness research group at the Federal University of Minas Gerais (UFMG) in Brazil. Among the effects of Mindfulness are mentioned: reduction of stress, anxiety, depression, and pain; improvement of cognitive performance, quality of life and sleep both patients and also health care professionals^{3,4,8-11}.

MINDFULNESS ATTITUDES

In the book *Full Catastrophe Living*, the exponent of Mindfulness meditation in the West, Jon Kabat-Zinn presents Mindfulness Attitudes that can ameliorate working processes and promote a healthier working environment, especially in the contemporary framework of the COVID-19¹². These attitudes can be useful for stress coping by healthcare professionals, especially:

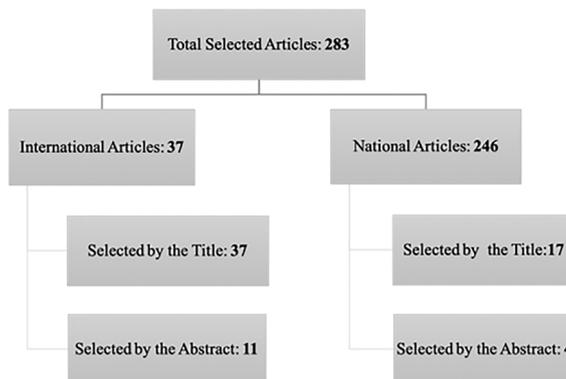


Figure 1. Flowchart of articles selection.

Tabela 1. Artigos e conclusões.

Reference	Country of Study	Type of Study	Population of the Study	Conclusions
The Lancet/Psychiatry (2020)	China	Corresponding Article	Primary care health professionals	Having knowledge about psychological interventions for health professionals can collaborate for a better approach for future interventions throughout unexpected outbreaks of infection diseases
Brain, Behavior and Immunity (2020)	China, Fuyang, Wuhan, Singapore	Systematic Review	General health professionals	a high percentage of health professionals experience significant high levels of anxiety, depression and insomnia during the COVID-19 pandemic
Complementary Therapies in Clinical Practice (2019)	Brazil	Non-randomized Clinical Trial	Primary care health professionals	It is feasible to implement a 4-week Mindfulness program for health professionals.
Annals of Internal Medicine American College of Physicians (2020)	NA	Corresponding Article	General health professionals	Health professionals should seek for mental health assistance if necessary
Irish Journal of Psychological Medicine (2020)	Ireland	Prospective Article	Primary care and General health professionals	The introduction of Mindfulness and Meditation practices during the COVID-19 pandemic is beneficial for stress reduction and coping with anxiety.

Beginner’s Mind – To cultivate a state of mind willing to learn, with more receptiveness to the new.

Nonjudgement – To become aware that the mind is always making judgments, as we direct our attention to the thoughts.

Acceptance – To accept that things are as they are, not as a passive process but as an individual decision and a starting point for those who seek interior or exterior transformation.

Other Mindfulness Attitudes that could be applied to health promotion and prevention of emotional illness at the working environment throughout the Pandemic are non-attachment, confidence, patient, non-effort, gratitude, and generosity. The compassionate and generous practice of meditation can promote a social connection as well as encourage the maintenance of a state of optimism and positivity¹³.

MINDFULNESS-BASED INTERVENTIONS (MBI) FOR HEALTHCARE PROFESSIONALS

Healthcare professionals are daily exposed to several stressors in the work environment, which can trigger physical suffering and mental illness. Throughout crises such as the current COVID-19 Pandemic, the burden can be even more pronounced, increasing substantially the risks of sickness among these professionals¹⁴. Over the past few months, symptoms such as lack of appetite or excessive hunger, insomnia or drowsiness, persistent body aches, weakness, unexplained tremors, rushing, irritability, restlessness, difficulty in relaxing, low concentration, low energy, discouragement, and hopelessness have been common among the healthcare professionals. All of these symptoms can represent excessive and prolonged to emotional and interpersonal stress, in addition to Burnout³.

However, little has been said about measures for stress management as well as psychoeducation. These actions should be encouraged by the healthcare institutions as they are essential for the good care of the employees, also promoting the strengthening of the team. Another complicating factor for the healthcare professionals is their difficulty in sharing their problems with colleagues or even employers, as well as the reluctance to seek professional help, which is mainly due to feelings of shame and failure, stigmatization, fear of restrictions on performance, and possible career implications. Various evidence suggests that physicians and nurses have a feeling that they have a professional duty and commitment to continue working throughout the Pandemic. As a result, many healthcare professionals omit their mental health symptoms and suffering, which can result in serious consequences including a diminished engagement to patient care, productivity, and job satisfaction, in addition to a greater risk for chemical dependency and suicide¹⁴.

The United Nations (UN 2020) advised that a critical factor throughout the preparation, response, and recovery from the COVID-19 Pandemic will be the mental health care for the healthcare professionals. Besides, it is emphasized that it is the healthcare professional's responsibility to cultivate self-care and also involvement in mental health care. Accordingly, it is clear that among the functions of the Public Health System in facing the Pandemic is the establishment of actions aimed not only at the population's health but also for the healthcare professionals. Despite all the orientations, the protocols for clinical management of the COVID-19 in Brazil depict only protective measures concerning issues related to biosafety². In China, some specific actions pointed to the psychological care for healthcare professionals facing the COVID-19 have already been established. Some measures provided activities for stress-reducing, such as online courses to guide the medical team to deal with common psychological problems and psychological supervision¹.

Considering the requirement for evidence-based approaches for stress reduction in healthcare professionals throughout the COVID-19 Pandemic, this article sought support from the best scientific literature available, national and international, in which the use of MBI as a therapeutic approach was investigated. Various studies have demonstrated

that the use of MBI for healthcare professionals promoted benefits such as self-care, self-compassion, wellbeing, and improvement in quality of life. As a result, practitioners have greater emotional regulation and resilience skills to better deal with stress on a daily basis, which decreased the risk for fatigue and Burnout¹⁵. The United Kingdom has already incorporated Mindfulness practices into the National Health Services (NHS) as an evidence-based therapy⁴. Since the establishment of the National Policy for Integrative and Complementary Practices (PNPIC), different therapies including meditation have been encouraged and supported in Brazil. The introduction of MBI by the PNPIC has been achieving more space in the scope of health care in this country, including Mindfulness programs aimed at addressing stress reduction in healthcare professionals^{3,4}. It is crucial to emphasize that in the context of a Pandemic, Mindfulness practices can be easily incorporated into daily life activities, providing changes in attitudes that may contribute to the enhancement of well-being and reduction of stress symptoms¹³.

CONCLUSION

The outbreak of COVID-19 triggered a serious global health crisis and the high levels of stress generated tend to compromise the entire population's mental health, in particular, the healthcare professionals. There are scientific evidences that MBI may positively influence the perception and management of stressful demands by healthcare professionals. In addition to stress reduction, MBI can also launch concepts of self-compassion, acceptance, empathy, and life values for the daily life activities of such workforces. In this sense, MBI may postulate a shift in perception and management of stressful demands, both professionally and personally throughout the COVID-19 Pandemic. MBI is a low-cost intervention with high feasibility and acceptability, as well as straightforward to be learned and reproduced online. However, further studies are necessary to confirm the applicability of MBI for stress reduction in healthcare professionals throughout the COVID-19 Pandemic.

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AUTHORS' CONTRIBUTION:

The first name described is of the main and corresponding author. The following coauthors are listed in alphabetical order. The authors' contributions are described according to the taxonomy described below: Conceptualization, Research, Methodology, Visualization & Writing – analysis and editing: Paiva SPC; Nery SF. Project Administration & Supervision: Paiva SPC. Writing – original draft: Paiva SPC; Marques MAS; Silveira CTB; Fiuzza IM; JPCM Farias; Nery SF.

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