# Possible strategies for confronting Burnout among healthcare professionals during the coronavirus pandemic

Possíveis estratégias de enfrentamento do Burnout entre profissionais de saúde durante a pandemia do coronavírus

## Taynara Carvalho de Oliveira<sup>1</sup>, Karoline Barbosa da Silva<sup>1</sup>, Luíza Floriano<sup>1</sup>, Patricia Vieira Xavier<sup>1</sup>, Luana Lira Righi<sup>2</sup>

Oliveira TC, Silva KB, Floriano L, Xavier PV, Righi, LL. Possible strategies for confronting Burnout among healthcare professionals during the coronavirus pandemic / Possíveis estratégias de enfrentamento do Burnout entre profissionais de saúde durante a pandemia do coronavirus. Rev Med (São Paulo). 2021 Nov-Dec;100(6):586-92.

ABSTRACT: One of the most exposed groups during the SARS-CoV-2 pandemic is the healthcare workers, which increase the probability of Burnout Syndrome (SB) in these professionals. Shortages of personal protective equipment, risk of exposure to the virus and working more hours than usual may increase the SB. This work aimed to highlight possible strategies to avoid SB in healthcare workers during the SARS-Cov-2 pandemic. Some studies were found by using the terms: 'Covid' AND 'healthcare professional' AND 'burnout'. These studies highlight the need to invest more resources in physical and mental health, in psychological support, in which can be used problem-focused coping and positive thinking coping. Additionally, discussion workshops on strategies and skills for mental and professional balance were mentioned, including the "Death Cafe", in which professionals discuss death. The strategies described in this review show satisfactory possibilities for intervention, aiming to reduce the effects of BS.

**Keywords:** Professional burnout; Coronavirus infections; Mental health assistance.

RESUMO: A síndrome de Burnout (SB) se refere ao esgotamento profissional, a qual está sendo exacerbada durante a pandemia do SARS-CoV-2. A falta de equipamentos de proteção individual, maior exposição ao ambiente de risco e aumento da jornada de trabalho, contribuem para o desenvolvimento da SB. Assim, o presente trabalho foi desenvolvido com o objetivo de evidenciar possíveis estratégias de enfrentamento da SB em profissionais de saúde durante a pandemia do SARS-Cov-2. Foi realizada uma revisão da literatura, com os termos de busca: "Covid" AND "healthcare professional" AND "burnout". Os artigos revisados discutem a necessidade de se investir na saúde física e mental dos profissionais da saúde com apoio psicológico, no qual pode-se utilizar estratégias de enfrentamento focado no problema ou com reinterpretação positiva. Adicionalmente, foram citados workshops de discussão sobre estratégias e habilidades para equilíbrio mental e profissional, entre eles, o denominado "Death Cafe", no qual os profissionais discutem sobre a morte. As estratégias descritas nesta revisão mostram possibilidades satisfatórias de intervenção, visando reduzir os efeitos da SB.

Palavras-chave: Esgotamento profissional; Infecções por coronavírus; Assistência à saúde mental.

I Congresso Acadêmico Médico São Bernardo, 2021, São Bernardo do Campo, SP.

<sup>1.</sup> Discente de Medicina da Universidade Nove de Julho – SBC. ORCID: Oliveira TC - https://orcid.org/0000-0002-7659-0102; Silva KB - https://orcid.org/0000-0001-6417-4673; Floriano L - https://orcid.org/0000-0002-7270-431X; Xavier PV - https://orcid.org/0000-0001-9891-4713. E-mail: carvalho. coliveira@uni9.edu.br, karoline.barbosa@uni9.edu.br, luizafloriano@uni9.edu.br, p.v.xavier@uni9.edu.br.

 $<sup>2.\</sup> Docente\ na\ Universidade\ Nove\ de\ Julho\ -\ SBC,\ ORCID\ -\ https://orcid.org/0000-0002-2316-5057-luanarighi@gmail.com.$ 

Endereço para correspondência: Taynara Carvalho de Oliveira. Rua Doutor Hélio da Mata Souza, acesso 5, Bloco 32 – Apto. 43. Jardim Alvorada. Santo André, São Paulo. Email: carvalho.coliveira@uni9.edu.br.

## INTRODUCTION

The SARS-CoV-2 virus, which probably emerged in the Wuhan district of China, is responsible for the biggest health crisis of this century. In Brazil, the crisis worsened in early 2020, when the number of infected people and the number of deaths began to grow exponentially<sup>1,2</sup>.

All sectors of society have suffered the economic and social consequences related to the COVID-19 pandemic, and in this context, the role of health professionals stands out. These professionals face an importante pressure during their work, which can increase stress and anxiety, especially when they work in emergency rooms, exclusive sectors for treatment of Covid-19 and intensive care units (ICU)<sup>1</sup>.

The lack of personal protective equipment, increase of deaths and pharmacological deficiency during the SARS-CoV-2 pandemic, contributing to high psychological stress of these professionals<sup>2,3,4,5,6</sup>. Additionally, a health professional working during the pandemic is exposed to a higher risk environment, increasing the concern of this professional with their own health and that of their families<sup>2</sup>. The pandemic also impacted friendship and family relationships due to fear of exposing friends and family to infection<sup>1</sup>. Health professionals may be psychologically exhausted with the workday, added to changes in the sleep pattern commonly reported by professionals, in addition to the lack of organization between teams<sup>7</sup>. Burnout Syndrome (BS) is an occupational disease, affecting daily lives, due to an exhaustion which increases exponentially. BS can be associated with wor, situations related to a patient or health professional's personal life<sup>10</sup>.

Even before the pandemic, health professionals could have Burnout, however, this condition has worsened due to some factors, such as high workload. The stress suffered by professionals can be even worse when there is limited organizational support in the healthcare institutions<sup>11</sup>. Some stressors may accentuate the symptoms resulting from BS, such as lack of essential resources in hospitals, lack of personal protective equipment (PPE) that directly impact increasement in COVID-19 cases, reduction of drug disponibility and lack of resources to meet current demands<sup>6</sup>.

As health professionals are directly exposed to virus, added to the lack of PPE and insecurities and uncertainties arising from the pandemic, end up helping even more the development and progression of BS. This situation leads to physical and psychological impairment, affecting both professional and interpersonal relationships, worsening burnout<sup>11</sup>.

In 2020, a study involving 33 countries showed that 51.4% of participants reported emotional exhaustion related to work during pandemic. The same study showed that

participants from the United States of America reported the highest Burnout rate, 62.8%<sup>11</sup>. Another study carried out in the Republic of Korea shows that Burnout is responsible for more than 90% of the feelings of anguish in professionals who are working on the front lines against Covid-19<sup>3</sup>.

The studies discussed show the importance of Burnout syndrome in health professionals during the COVID-19 pandemic. From this, an important topic is how to deal with BS, that is, what strategies health professionals or institutions can adopt to prevent and control Burnout.

In this context, it is important to introduce the concept of "coping" defined by Lazarus<sup>18</sup>, which refers to the set of strategies used to deal with a disturbing agent<sup>19</sup>. Lazarus and Folkman discuss from the definition of the term to the factors that influence it<sup>20</sup>. These works address coping strategies applied to different situations related to the health area, including patients<sup>21</sup> and doctors<sup>22,23</sup>.

Coping strategies can be problem-focused or emotion-focused. In the first case, the aim is to act on the source of stress, modifying it or seeking to solve the problem itself<sup>19</sup>. In the second case, it seeks to alleviate the emotional stress associated with the stressful situation<sup>19</sup>. Still, in this context, there is the phenomenon of resilience, which is a resistance to stress, which can vary between individuals according to the situations they experience and their personality characteristics<sup>19</sup>.

The study of coping strategies by health professionals is important, since their work environment involves many adverse situations, such as long working hours and carrying out several tasks at the same time. Through a questionnaire, a group of authors assessed coping and resilience strategies used by physicians<sup>23</sup>. The study shows that participants seek to achieve a balance between work and personal life, having a leisure activity and relying on the support of family members, for example. In addition, the work highlights the participants' attitudes to deal with stress, such as not interpreting a colleague's negative reaction as a personal offense, and acceptance of their mistakes<sup>23</sup>. Another group of authors performed two types of interventions on physicians. The first type of intervention consisted of a session with a psychiatrist or specialist related to occupational medicine, in which coping strategies were identified and encouraged. The second type of intervention consisted of a 5-day group course with daily lectures, group discussions, physical activity and individual sessions. After the interventions, the authors showed a significant change in the coping strategies adopted by physicians who remained for up to 3 years<sup>24</sup>.

Therefore, given the importance of Burnout Syndrome in health professionals, the study of coping strategies is important. Therefore, the present work is a literature review on these issues during the COVID-19 pandemic, a period in which the development of SB cases became even more relevant.

## **OBJECTIVES**

The present work is a literature review about strategies to deal with BS in health professionals during the SARS-Cov-2 pandemic.

## MATERIALS AND METHODS

The first stage of the review was conducted on PubMed databases, using "AND" to combine the search terms: 'Covid', 'Healthcare Professional' and 'Burnout'. This initial search showed 196 studies. After this step, the articles were selected based on titles and abstracts.

Chart 1: Characteristics of studies reviewed

Works not related to Burnout or COVID-19 pandemic were excluded. Subsequently, the articles were read, being excluded: review articles, letter to the editor, articles that did not address burnout in the 2020 pandemic and articles not written in Portuguese or English. The following inclusion criteria were adopted: full articles, articles that relate burnout with health professionals and 2020 pandemic. After this stage, 14 articles were selected.

## **RESULTS**

Fourteen articles were selected, their results are described in Chart 1.

Reference	Year	Main results	Sample
1	2020	The results show that levels of emotional exhaustion and stress increased from pré-pandemic to pandemic.	426 emergency medicine physicians
2	2020	The results show that covid can have a strong impact on ICU workers. The authors indicate training sessions on ICU to avoid emotional stress.	208 ICUs workers of a French teaching hospital: physicians, nurses, assistants, students, etc.
3	2020	The results showed that 90% of the professionals had burnout. The most challenging issues were the lack of doctors to provide care, lack of protective equipment, pressure for research and lack of guidelines for management during pandemic.	265 physicians.
4	2020	The results show that 90,4% of health professionals report the importance of psychological support in the work centers, and 43,3% agree that they may need this kind of support in the future.	157 health professionals: physicians, nurses and auxiliary nurses.
6	2020	The authors discuss that the psychosocial impact of COVID-19 is multifactorial, being influenced not only by the work performed by health professionals, but also by their ability to perform coping strategies	In this article, the authors discussed this theme. Despite being an original article, and therefore meeting the inclusion criteria of this review, there was no data collection.
7	2021	The results show that 37.5% of the professionals are afraid of infection and its consequences,	557 nurses of emergence intensive care from 26 public hospitals in Madrid.
8	2020	The authors discuss that medical burnout rates have increased due to emotional demands.	There was no data collected, as the article was a discussion about burnout.
9	2020	The results show that 21.5% of the professionals declared that there were inadequately equipped.	337 participants: physicians, psychologists, nurses and social assistants.
10	2021	Results revealed that resilience has a partial influence on Burnout, suggesting that there are other associated factors.	2008 health professionals: physicians, nurses, pharmaceutical, psychologists, nutritionists and health assistants.
11	2020	The results showed that 51% of participants reported Burnout. The authors discussed some factors associated with Burnout, such as feeling pressured at work, contact with patients with COVID-19 and the impact of work on activities related to home.	2.707 health professionals from 60 countries.
14	2021	The results show that Burnout has physical, psychological and social impact.	1.126 assistant medical officers, doctors, health inspectors, hospital food preparation personnel, medical laboratory technologists, nurses, paramedics, pharmacists, physicians, physiotherapists, dieticians, therapists, psychologists, counsellors, radiographers, and social workers from public and private healthcare services to enroll in this study.

continue

Chart 1: Characteristics of studies reviewed

continuation

Reference	Year	Main results	Sample
15	2020	The authors discuss factors related to psychological stress and describe an intervention based on psychological resilience.	There is no numerical data, as this is a special article. Despite being an original article, and therefore meeting the inclusion criteria of this review, there was no data collection.
16	2020	The authors describe micropractices performed by health professionals aiming to deal with the stress related to work. Micropractices were discussed in a workshop, where professionals shared their personal experiences about prevention burnout and well-being.	This is an opinion article, thus, there was no data collection.
17	2020	This is a protocol of research, which proposes to informally discuss death and disease, called Death Café.	

Chart 2 summarizes the strategies described in each reference, as the main of this review was to discuss the strategies of deal with Burnout.

Table 2: Health professionals strategies to deal with Burnout during COVID-19

References	Strategies		
1	In this article, it was oriented that physicians prioritize themselves and their families. In addition, it was oriented use PPE properly and to relieve stress related to fear of contagion.		
2	In this article, personalized psychological care is offered to health professionals and training to prevent psychological repercussions.		
3	The article discusses the need of support teams to assist professionals.		
4	The article highlights that the correct use and availability of PPE, and the lack of resources contributes to Burnout. I addition, the authors suggest psychological interventions for long periods, adjusting for each professional. Furthermore the authors suggest training health professionals to deal with extreme situations.		
6	In this article, there was no data collection. However, it suggests strategies: strengthening of mental health systems, social contact with loved ones and psychotherapy.		
7	The article does not aim to describe coping strategies, but to report the difficulties experienced by professionals during the pandemic. However, the authors suggest that initiatives related to physicians' mental health during the pandemic should be maintained.		
8	The authors suggest medical wellness programs, medical health programs, increasement of screening measures, and increasement of access to treatment resources, including therapy and psychiatry support. Such strategies face new barriers to their implementation in the pandemic due to the increase in hours worked and the reduction of doctors working on the front lines.		
9	This article cited psychiatric evaluation, individual psychotherapy and group interventions performed online.		
10	The article does not discuss coping, however, it shows the relationship of resilience and Burnout. The authors show that participants' levels of resilience and Burnout are inversely proportional. However, the authors emphasize that the degree of resilience is not the only factor influencing BS.		
11	The article reports that burnout levels could be reduced by supporting the physical and emotional needs of professionals supporting family issues, such as daycare, transport and temporary housing.		
14	According to this article, the most described coping mechanisms among health professionals were problem-focuse coping (active and planning) and coping through positive thinking (positive reinterpretation, acceptance and humor		
15	The article proposes an intervention based on an existing model of the US Army. In this model, the intervention woul be organized into 3 levels of support, involving support for all professionals, for specific departments and individual support.		
16	This article suggests micropractices. The authors suggest that professionals can use common activities to create a special moment for themselves and mindfulness. Other micropractices are: naming emotions and writing down three good things the professional is grateful for.		
17	The article suggests informal discussions about pain, loss, illness and death, called Death Cafés. The authors suggest conducting these discussions virtually, given the need for social isolation during the pandemic.		

## DISCUSSION

The COVID-19 pandemic had a great impact on the population's professional and personal relationships. This impact is worse when health professionals are considered, as they experienced an increase in stressors related to their personal and professional life, such as lack of PPE and increased workload, contributing to the development of Burnout<sup>6</sup>. Furthermore, there are individual factors, such resilience, which influence Burnout<sup>10.</sup> Some authors showed that professionals who had greater resilience, considered by them as an individual's ability to adapt to adversity, had a lower chance of developing Burnout<sup>10</sup>. Thus, it is necessary to discuss coping strategies in health professionals during the COVID-19 pandemic. Additionally, SB changes not only physical well being, but also workplace relationships (with patients and with other professionals)<sup>5</sup>. Thus, the present study aimed to carry out a literature review on ways of coping with BS in health professionals during the COVID-19 pandemic.

Psychological care is the coping strategy most described<sup>2,3,4,6,8,9,15,13</sup>, which can be done remotely, due to social isolation<sup>9,13</sup>. However, despite the use of technologies that allow contact even distance, health professionals reported feeling helpless, and that remote therapy was not able to offer the desired benefits<sup>13</sup>. Thus, it is important to provide personalized psychological care<sup>2</sup>, and to organize a support team specialized on this kind of suport<sup>3</sup>. In addition, authors discuss the need to invest in other strategies to support mental health, supporting families, offering daycare and transport<sup>11</sup>. Finally, this kind of intervention should be maintained even after pandemic<sup>7</sup>.

Malaysian healthcare professionals were evaluated during COVID-19 pandemic. A questionnaire was used to assess factors and associated symptoms related to BS. The study showed that more than half of the professionals were experiencing Burnout. They reported symptoms of frustration, physical and emotional exhaustion. These professionals described workload, uncertainties related to the pandemic and challenging work-family balance as the sources of BS. The authors also evaluated coping strategies, classified as: problem-focused strategies, positive thinking, support-seeking, maladaptive coping<sup>14</sup>. In the first type, professionals perceived psychological support, took a break doing exercise, and tried to make plans. In positive thinking, professionals reported using humor, accepting the situation, and using positive reinterpretation, such as thinking that patients need the professional or doing something positive (such as singing and dancing). Support-seeking involves spiritual support or emotional support, sharing feelings with colleagues or family members. Finally, maladaptive coping involves trying to distract oneself, venting anger, behavioral disengagement (such as avoiding house duties) and using substances abuse<sup>14</sup>.

Another group of authors proposes an intervention

called Intervention in Psychological Resilience, which was developed based on a model of support from the US Army. According to the authors, this intervention emphasizes self-care, social connection, self-efficacy and support for mental health. The intervention would be organized into 3 support levels. The first level requires no additional or specialized organizational resources. Level 2 involves specific frontline units or departments through an identified mental health consultant. Level 3 provides individual support for healthcare professionals who are experiencing a high degree of stressors and challenges, which require specialized and quick access to additional resources. The authors did not evaluate this intervention strategy, that is, the article is a presentation of a possible intervention<sup>15</sup>.

Coping strategies called micropractices involve tasks that require a few minutes of dedication. It is reported that during a workshop aimed at discussing and sharing techniques, health professionals demonstrated that they like to learn how to perform the micropractices. The authors argue that the exchange of experiences was very beneficial, as they can guide professionals to perform micropractices to feel better and at the same time realize that their colleague feels the same, which is comforting<sup>16</sup>. The authors mention that micropractices were discussed in this workshop, such as: mindfulness practice during handwashing, making lists of what the professional is grateful for, naming the emotion and taking deep breaths. It is suggested that these practices, as they are quick and simple to be done, will not interfere with the daily activities and they can help prevent emotional stress<sup>16</sup>.

Death Cafés were also mentioned as a practice to prevent Burnout in health professionals, especially in those who worked in intensive care units (ICU). Death Cafés are meetings to talk about death, in the case of health professionals they will talk about the losses on duty, how these deaths were and how they feel about it. However, during the pandemic, holding these meetings became more difficult, one possibility pointed out by the authors would be the online format. The authors argue that professionals are quite resistant to accepting the experience, but the professionals who participate report being able to better deal with the questions, insecurities, stress and feelings when they have contact with death<sup>17</sup>.

### CONCLUSION

The present work is a literature review about strategies to deal with Burnout Syndrome during SARS-Cov-2 pandemic. It was concluded that psychological care, support for family and mental health support are possible strategies for health professionals. In addition, it was described the micropractices, as they can be performed during daily tasks, and the *Death Cafés*, which provide discussions and reflections about death.

**Author contributions:** The authors *Oliveira TC, Silva KB, Floriano L, Xavier PV, Righi LL* - performed data analysis and interpretation, and wrote the manuscript. *Righi LL* - the research advisor, designed the study, and contributed to the writing and final critical review.

#### REFERENCES

- Rodriguez RM, Medak AJ, Baumann BM, et al. Academic emergency medicine physicians' anxiety levels, stressors, and potential stress mitigation measures during the acceleration phase of the COVID-19 pandemic. Acad Emerg Med. 2020;27(8):700-07. doi: 10.1111/acem.14065.
- Caillet A, Coste C, Sanchez R, Allaouchiche B. Psychological impact of COVID-19 on ICU caregivers. Anaesth Crit Care Pain Med. 2020;39(6):717-22. doi: 10.1016/j.accpm.2020.08.006.
- Park SY, Kim B, Jung DS, et al. Psychological distress among infectious disease physicians during the response to the COVID-19 outbreak in the Republic of Korea. BMC Public Health. 2020;20(1):1811. doi: 10.1186/s12889-020-09886-w.
- Martínez-López JÁ, Lázaro-Pérez C, Gómez-Galán J, Fernández-Martínez MDM. Psychological impact of COVID-19 emergency on health professionals: burnout incidence at the most critical period in Spain. J Clin Med. 2020;9(9):3029. doi: 10.3390/jcm9093029.
- Karampelias V, Karonis D, Psaroudi V. The psycho-emotional impact of COVID-19 on surgical staff working in emergency departments. Eur J Trauma Emerg Surg. 2020;46(4):747-9. doi: 10.1007/s00068-020-01411-3.
- Rodríguez BO, Sánchez TL. The psychosocial impact of COVID-19 on health care workers. Int Braz J Urol. 2020;46(suppl.1):195-200. doi: 10.1590/S1677-5538. IBJU.2020.S124.
- González-Gil MT, González-Blázquez C, Parro-Moreno AI, et al. Nurses' perceptions and demands regarding COVID-19 care delivery in critical care units and hospital emergency services. Intensive Crit Care Nurs. 2021;62:102966. doi: 10.1016/j.iccn.2020.102966.
- 8. Kingston AM. Break the silence: physician suicide in the time of COVID-19. Mo Med. 2020;117(5):426-9. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7723130/
- 9. Rapisarda F, Vallarino M, Cavallini E, et al. The early impact of the Covid-19 emergency on mental health workers: a survey in Lombardy, Italy. Int J Environ Res Public Health. 2020;17(22):8615. doi: 10.3390/ijerph17228615.
- 10. Serrão C, Duarte I, Castro L, Teixeira A. Burnout and depression in portuguese healthcare workers during the COVID-19 pandemic the mediating role of psychological resilience. Int J Environ Res Public Health. 2021;18(2):636. doi: 10.3390/ijerph18020636.
- 11. Morgantini LA, Naha U, Wang H, et al. Factors contributing to healthcare professional burnout during the COVID-19 pandemic: A rapid turnaround global survey. PLoS One.

- 2020;15(9):e0238217. doi: 10.1371/journal.pone.0238217.
- 12. Sever MS, Ortiz A, Maggiore U, Bac-García E, Vanholder R. Mass disasters and burnout in nephrology personnel: from earthquakes and hurricanes to COVID-19 pandemic. Clin J Am Soc Nephrol. 2021;16(5):829-37. doi: 10.2215/CJN.08400520.
- 13. Joshi G, Sharma G. Burnout: a risk factor amongst mental health professionals during COVID-19. Asian J Psychiatr. 2020;54:102300. doi: 10.1016/j.ajp.2020.102300.
- 14. Roslan NS, Yusoff MSB, Razak AA, Morgan K. Burnout prevalence and its associated factors among Malaysian healthcare workers during COVID-19 pandemic: an embedded mixed-method study. Healthcare (Basel). 2021;9(1):90. doi: 10.3390/healthcare9010090.
- 15. Albott CS, Wozniak JR, McGlinch BP, Wall MH, Gold BS, Vinogradov S. Battle buddies: rapid deployment of a psychological resilience intervention for health care workers during the COVID-19 pandemic. Anesth Analg. 2020;131(1):43-54. doi: 10.1213/ANE.000000000000004912.
- 16. Fessell D, Cherniss C. Coronavirus disease 2019 (COVID-19) and beyond: micropractices for burnout prevention and emotional wellness. J Am Coll Radiol. 2020;17(6):746-8. doi: 10.1016/j.jacr.2020.03.013.
- 17. Bateman ME, Hammer R, Byrne A, et al. Death Cafés for prevention of burnout in intensive care unit employees: study protocol for a randomized controlled trial (STOPTHEBURN). Trials. 2020;21(1):1019. doi:10.1186/s13063-020-04929-4.
- 18. Lazarus, RS. Psychological stress and the coping process. New York: McGraw-Hill; 1966.
- De Marco, MA. Comunicação dolorosa. In: De Marco MA, Abud CC, Lucchese AC, Zimmermann, VB. Psicologia médica: abordagem integral do processo saúde-doença. Porto Alegre: Artmed; 2012. p.354-55.
- 20. Folkman S, Lazarus RS. An analysis of coping in a middle-aged community sample. J Health Social Behav. 1980;21(3):219-39. https://doi.org/10.2307/2136617.
- 21. Tschuschke V, Karadaglis G, Evangelou K, Gräfin von Schweinitz C, Schwickerath J. Psychological stress and coping resources during primary systemic therapy for breast cancer. results of a prospective study. Geburtshilfe Frauenheilkd. 2017;77(2):158-68. doi: 10.1055/s-0043-101237.
- 22. Tattersall AJ, Bennett P, Pugh S. Stress and coping in hospital doctors. Stress Med. 1999;15:109-13. doi: 10.1002/(SICI)1099-1700(199904)15:2<109::AID-SMI793>3.0.CO;2-5
- 23. Dowd'O E, Connor O P, Lydon S, Mongan O, et al. Stress,

coping, and psychological resilience among physicians. BMC Health Serv Res. 2018;18(1):730. doi: 10.1186/s12913-018-3541-8.

24. Isaksson Ro KE, Tyssen R, Hoffart A, Sexton H, Aasland OG, Gude T. A three-year cohort study of the relationships

between coping, job stress and burnout after a counselling intervention for help-seeking physicians. BMC Public Health. 2010;10:213. doi: 10.1186/1471-2458-10-213.

Received: 2021, July 22 Accepted: 2021, November 10