

Strategies for Prevention and Management of Burnout Syndrome At the Medical Staff

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Abstract: *Introduction.* Burnout syndrome is a complex phenomenon of great magnitude, which occurs in extremely demanding professions emotionally and nervously, with deep echoes in the psycho-affective structure of individuals, which makes its mark on professional life, but also that social. *Acknowledging the problem and requesting specialized help remain the first step toward healing.*

Material and methods. This article reviews the literature on the discovery of burnout management strategies and its adverse effects. Articles found through this indexed search (PubMed and Google Scholar: 2017-2021) were reviewed and analyzed manually by the authors to identify relevant studies.

Discussions. This study specifically focuses on the strategies that health care workers use to address resource depletion associated with fatigue, reduce work burden, and alter work characteristics to increase motivation.

Conclusions. In order to prevent, manage or treat burnout, it is necessary to recognize the problems that contribute to burnout. Focusing on individual approaches, along with organizational ones, seems to be a promising way to deal with burnout and stimulate a healthier workforce.

Keywords: *mental health, burnout, psychotherapy, cognitive behavior therapy, organizational stress.*

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Introduction

According to the last revision of International Classification of Diseases (ICD-11), the concept of burnout is included as a professional phenomenon. It is described in the chapter “Factors that influence health or the contact with health services” – which includes the reasons for which people ask for health services, but they are not classified as diseases or health affections (World Health Organization, 2019).

Burnout is a syndrome conceptualized as a result of the chronic stress from the workplace, which was unsuccessfully managed (Silistraru et al, 2021). The three key dimensions of this result are an overwhelming exhaustion, cynicism and detachment sentiments from work place and an inefficiency and lack of accomplishment feeling. The significance of this tridimensional pattern is that it clearly places the individual stress experience into social context and it involves the individual’s conception of himself and also of the others (Maslach & Leiter, 2016, Radulescu et al., 2020).

Stress and, further, the exhaustion syndrome are the main consequences of a professional activity carried on in a permanent mental tension. The exhaustion of the medical staff, usually, comes from the stress factors, among them the high work volume, making decisions of prioritizing life or death (the responsibility degree), working under the time pressure and limited organizational support (Morgantini et al., 2020, Luca et al., 2020).

The individual stress factors associated with exhaustion include neuroticism, involvement in useless adjustment strategies, sleep deprivation, excessive engagement, perfectionism, idealism and the off-balance between the professional life and the personal one, and also an inappropriate support system outside the work environment (Patel et al, 2018).

The organizational factors, such as negative management behaviors, expectations regarding the work task, insufficient rewards, limited interpersonal cooperation and limited promotion opportunities and social support for doctors may influence, also, the exhaustion (Wright & Katz, 2018). (figure 1)

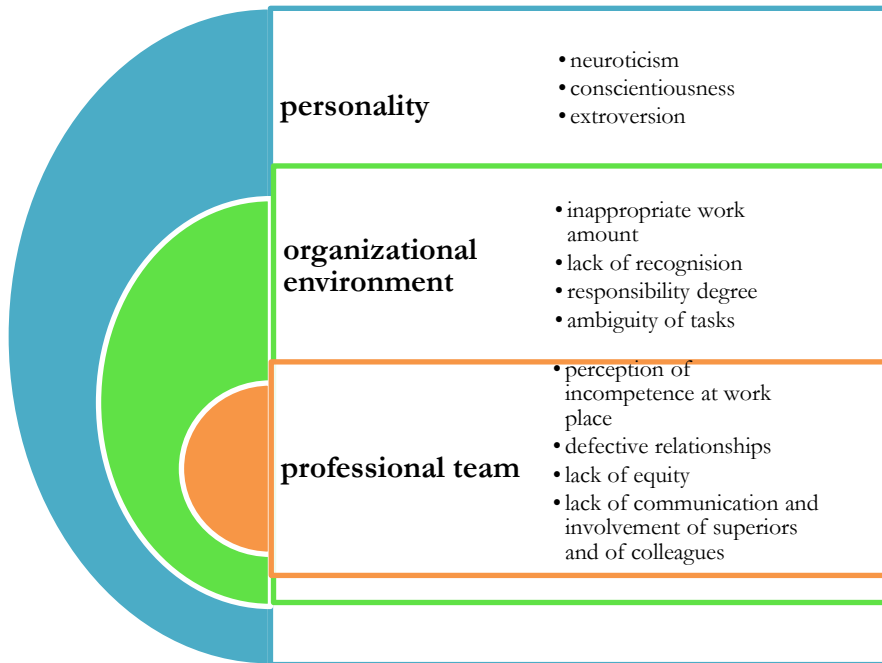


Figure 1. Factors associated with burnout syndrome
Source: After Wright & Katz, 2018

A better understanding of the relationship between these factors and the professional exhaustion could help the hospital managers take preventive and proactive measures to build an efficient and resilient workforce

1. Materials and methods

The search in literature (PubMed and Google Scholar) were made (2017-2021) using the key-word "burnout" and referring to it with "medical staff", "health system", "risk factors", "prevention" and "intervention". The articles found with this indexed search have been revised and manually analyzed by authors, in order to identify the relevant studies, including longitudinal control case studies, cross-sectional studies and cohort ones as systematic revisions. The searches were completed by manual search of reference lists from the eligible studies and systematic revisions.

This study summarizes the strategies used to cope with the burnout syndrome so that the workplace becomes less demanding and more motivating and to manage the interaction between the professional field and the unprofessional one.

2. Results and discussions

During the COVID-19 pandemic, the managers of more and more medical institutions began to be aware of the fact that the occurrence and development of burnout syndrome may influence the quality of the medical act (Wright & Katz, 2018; Lacy et al., 2018).

In specialized literature are listed two types of interventions to prevent the burnout syndrome: basic prevention represented by protection mechanisms against the burnout syndrome, with the management of risk factors; the secondary prevention represented by professional intervention strategies with the aim of improving the mental state of medical staff and ensuring an efficient work force (Chihai et al, 2020, Moscu et al., 2021).

2.1. Protection mechanisms against the burnout syndrome

The protection mechanisms against the burnout syndrome imply primarily the awareness of the risk to which the medical staff is exposed, followed by the identification and management of the risk factors.

2.1.1. Awareness of the risk

The risks may be biological (microbial and viral agents), chemical (addictions among medical staff), physical overwork (repetitive moves, weightlifting, extended orthostatic posture) with the risk of temporary/permanent invalidity; neuropsychic overload (stress and chronic fatigue, emotional exhaustion) (Cofaru et al., 2020; Sirghie et al., 2016; Sirghie, 2017).

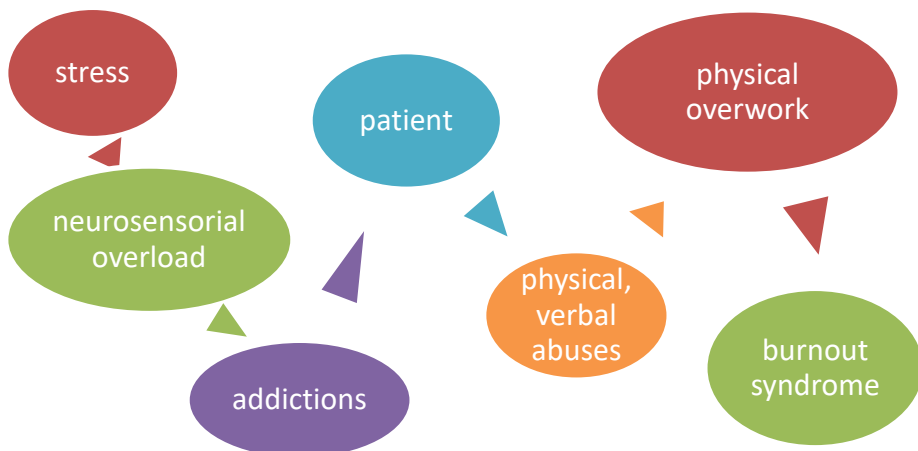


Figure 2. The risks towards the work health and safety for the medical staff (UE 2007-2014)

The management systems of work health and safety for the medical staff must include the constant participation of staff to the determination of objectives and measures regarding the work health and safety, references about the staff confrontation with the existing risks for health and ideas to improve the task assignment, the procedure sequences and of the real working conditions. (Figure 2) The managers of the institutions must ensure the resources necessary to apply these measures (The European Commission, 2014).

2.1.2. Identification and management of risk factors

According to specialized literature, the risk factors that may lead to installation of burnout syndrome are represented by lack of recognition, material, time, hierarchy, inappropriate leadership, difficult communication, working program (irregular working program, night shifts), conflicts (intimidation, verbal violence), cultural boundary and gender discrimination (Elbarazi et al., 2017; Junaković & Macuka, 2021; Wang et al., 2020). (figure 3)

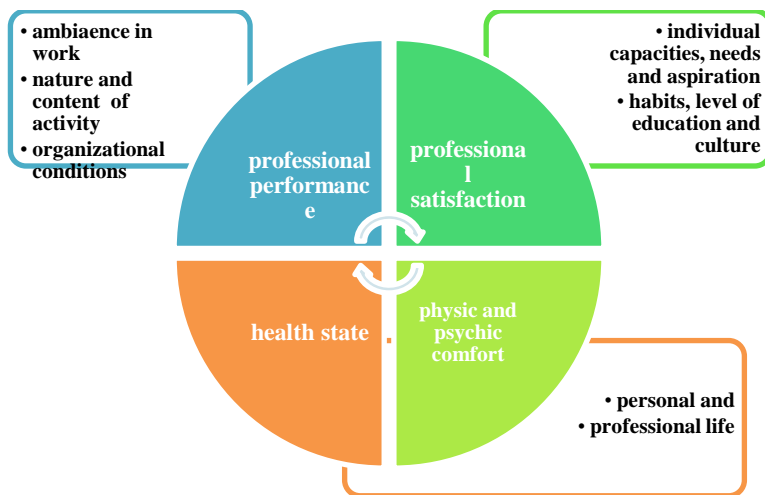


Figure 3. Dynamic interaction of the professional factors and the human ones and the relation with the health state (*adaptation after INCDPM Alexandru Darabont –Bucharest 2013*)

3.1.3. Protection mechanisms against the major risks identified at the work place

3.1.3.1. Stress

A possible strategy that individuals can use daily to reduce the exhaustion level is to recover from the workplace (Demerouti, 2015). The stress and professional exhaustion level may be reduced by up taking

behaviors that improve the physical health, such as nutrition, exercise, but they may also include self-knowledge techniques, relaxation, meditation (Worther & Cash, 2022).

Another strategy I represented by the continuous professional development in the medical field with the purpose of maintaining and improving the professional competence standards and ensuring the quality of the supplied health care (Official Gazette of Romania 404/2021). The support from the social environment (colleagues, family, friends) by development of active listening and communication skills turned out to play a fundamental role in stress management (Verlando-Soriano et al., 2020).

3.1.3.2. Physical and neuropsychic overload

The physical overload can be diminished by avoiding the repetitive movements which may influence the osteoarticular system, the endowment with high-performing equipment that simplify the execution of maneuvers, kinetotherapy and medical gym included in the working hours of the medical staff (Goga, 2020).

The neuropsychic overload can be diminished by discussing openly about the problems within the team, improving the life style (outdoor exercise, healthy food, hydration) and proper management of the working program, so that more time is assigned to the personal life of each individual than it is assigned for the job.

3.1.3.3. The patient and the abuse

In the last years, health professionals are often the object of the patients' aggressions, and the hospitals often become places where violences, verbal and physical aggressions happen.

Studies from other states show that aggression is a more serious problem in the emergency department and adequate precaution measures must be taken. The aggression, verbal or physical, against the medical staff contributes to the degrading of medical services, to job dropout and disruption of physical and mental health (Curteanu & Ciobanu, 2021).

3.2. Professional strategies of intervention

3.2.1. Individual or group psychotherapeutic interventions

3.2.1.1. Balint method

In 1986 the International Balint Federation was recognized by the European Council as a non-governmental organization, 7 years later the Balint Association from Romania is registered at Miercurea Ciuc. At present there are active groups of doctors and psychologists in Brasov, Sfantul Gheorghe, Odorheiu Secuiesc, Miercurea Ciuc and Targu Mures.

The Balint method represents a group therapy developed by the English psychiatrist of Hungarian origin, Mihaly Balint with his wife Enid, at the end of the 50s in Great Britain. Within these lectures a group of 12 family physicians has met to discuss clinical cases, in order to improve the relation between the doctor and patient by optimizing the communication skills and empathic abilities and decrease the exhaustion level (Yazdankhahfard et al, 2019).

The main advantage of the Balint method is that it helps the doctor to perceive his patients as human beings we have a life and relations outside the examination room. The leaders of the lecture were always initially psychoanalysts.

At present, a group may be lead by a family physician, or a mental health professional of one of each category. Regardless of their professional experience, all the leaders need training and experience in the specific method Balint (Salinsky, 2013).

3.2.1.2. The mindfulness type therapy

Mindfulness refers to a process that leads to a mental state defined by full awareness of the present, including the sensations, thoughts, body conditions, consciousness and environment, encouraging at the same time the open-mind's, curiosity and acceptance (Hofmann et al, 2010). The studies about the mindfulness type therapy have shown that there are improvements of the symptoms of anxiety and depression, improved the ability of emotions adjustment and decrease of the reaction to stress (Ruiz-Fernández et al., 2020).

The psychotherapist Jorg Fengler recommends the practice and careful observation of a common activity in all its shades (breath, speaking, driving, running, thought and emotion observation) in order to discover some particularities of these activities, of highclarityand intensity that have not been encountered in this form.

3.2.1.3. The adlerian psychotherapy

The Adlerian psychotherapy focuses on the individual's ability to adjust to feelings of inadequacy and inferiority towards the others, in Adler's theory, a person will be more perceptive and more cooperating when encouraged and when he has the feeling of suitability and respect. On the contrary, when a person is discouraged he will show a counterproductive behavior (competition, defeat and withdrawal)(GoodTherapy.org, 2022). The Adlerian therapy is based on the exploitation of childhood events, which need time, and the approach

may not be suitable for the individuals who look for quicker solutions to their concerns (Braaten et al., 2019).

3.2.1.4. The cognitive-behavioral psychotherapy

The cognitive-behavioral psychotherapy supposes the change of the thinking style and of the manner in which people act in stressful situations.

People with anxiety problems see themselves extremely vulnerable in some situations and are driven by the need to avoid contact with these things (eg. The refusal of public speaking, avoidance of physical effort, exam absence, avoidance of parks etc. Furthermore, these people fail to manage efficiently the anxiety/fear reactions (eg. hand shaking, accelerated heartbeat, nervous breathing, intense sweating etc.), that frequently makes them feel like they lost control.

The cognitive-behavioral psychotherapy aims to rectify the factors that determine the occurrence of anxiety symptoms or that favours the anxiety tendency to become chronic on long term basis. By psychotherapy people learn how to control their anxiety through efficient relaxation strategies, they learn how to observe their thoughts and behaviors that do nothing but feed the long term anxiety and learn how to replace these inefficient thoughts and behaviors with new thinking and acting patterns (Cazacu, 2020).

3.2.1.5. The associated psychiatric treatment

First line treatments for people with anxiety disorders or mild in severity depression include individual psychotherapies, self – management and psychological treatments. The pharmacological treatments may be considered for mild depression in some situations, including the patient's preference, the previous response to antidepressants or lack of results of non-pharmacological interventions.

According to the recommendations of the clinical practice guides for affective disorders of Royal Australian and New Zealand College of Psychiatrists (RANZCP), in case of mild to moderate episodes of anxiety disorders or depression, the psychological interventions can be enough, especially at the beginning of the disease. Nevertheless, within more severe episodes and those which have a chronic evolution it is recommended to add the antidepressant treatment or another combination of psychological and pharmacological treatment. In case of severe depression, pharmacotherapy is usually needed and, when there is a high risk of suicide or when the patient's state is threatened by the lack of nourishment of fluid intake, the emergency intervention is necessary and may include the electroconvulsive therapy (Malhi et al., 2015).

According to the guides of the American Psychiatry Association (APA), the efficiency of antidepressant medicine is usually comparable between and within the medicine classes, including selective inhibitors of serotonin recovery (SSRI), inhibitors of serotonin recovery and norepinephrine (SNRI), bupropion, tricyclic antidepressants (ATC) and monoamine oxidase inhibitors (MAOI).

3.2.2. Interventions at organizational level

The organizational culture in the medical field is based on the training for a proper risk assessment at institution level made by trained managers, risk minimization, counter the risk effects by deploying some staff policies specific for the medical branch in question, training the human resource in what concerns the control of risk factors through procedure deployment (scheduling the patients where possible, emergency assisted by more team members, flexible program for team members).

Carry out an efficient organizational chart by proper team assessment, followed by the practical organizing of professional performance criteria, integrity and mutual respect. The consolidation of a team and the preservation of the members' mental health is based upon the clear following of the team responsibilities, hierarchy setting, assignment of tasks and feedback request and the application of intervention procedures (Herdea & Binza, 2018).

The psychological counselling of the medical staff is a method recommended and used in the European Union, that allows the early identification of fatigue, the intervention by professional means and adjusted to each individual, to overcome the effects of extended stress.

In addition, preventive organizational strategies have been suggested, such as promoting healthy working climates, which focus on time management, balance between professional and private life and active usage of spare time (Loscalzo & Giannini's, 2017).

A meta-analysis of the interventions for preventing and diminishing the doctors' burnout has proven the support for the efficiency of both organizational and individual interventions (West et al., 2016).

Conclusions

Burnout is a phenomena more frequently seen in the medical world. To prevent, manage and treat the burnout syndrome, it is necessary to recognize the problems that lead to exhaustion. Thus, a proper level of understanding, both from side of medical staff and of the decision makers

side, would allow taking certain measures to support the profilaxy of burnout syndrome.

The best intervention strategy combines the organization with the personal responsibility for the bigger and bigger problem of the burnout: programs at organizational level can systematically help the medical staff recognize the early signs of exhaustion, promote health and self-care and re-establish the welfare.

Focusing individual approaches, along with organizational ones, seems to be a promising way to cope with burning and increase a healthier workforce. Focusing on individual approaches, along with organizational celebration, it looks like a promising fijloc of a face, which would be a more salty stimulus or workforce.

References

- Braaten, K., Whiston, M., & Eakman, T.,(2019). Ph burnout and workaholism: An adlerian and transdiagnostic trait perspective. [Braaten, K - Final.pdf \(alfredadler.edu\)](#)
- Cazacu, D. (2020). *Cognitive- behavioral psychotherapy in generalized anxious disorder* / D. Cazacu // Psychology in III millennium: Challenges and solutions Prov: MaterialsConf. Șt. Intern., 25 oct. 2019. – Bălți, 2020. – P. 230-234. [Digital institution achive: Cognitive- behavioral psychotherapy in generalized anxious disorder \[Article\] \(usarb.md\)](#)
- Chihai, J., Spinei, L., Cernișanu, M., Garaz, G., Eșanu, A., & Bologan, A. (2020). Probleme psihosociale determinate de pandemia COVID-19. *Revista de Științe ale Sănătății din Moldova*, 24(2), 161-169.
- Cofaru, F., Nica, S., Iancu, A., & Eremia, I. A. (2020). The safety of the savior—an important goal in 21st century Europe. *Romanian Journal of medical Practice*, 15(4), 73.
- Curteanu, M., & Ciobanu, E. (2021). Violence against medical staff: global spread. *Revista de Științe ale Sănătății din Moldova= Moldovan Journal of Health Sciences*. [Untitled-1.indd \(usmf.md\)](#)
- Demerouti E. (2015). Strategies used by individuals to prevent burnout. *European journal of clinical investigation*, 45(10), 1106–1112. <https://doi.org/10.1111/eci.12494>
- Elbarazi, I., Loney, T., Yousef, S., & Elias, A. (2017). The prevalence and the factors associated with exhaustion of health professionals in the Arabic countries: a systematic revision. *BMC health research services*, 17 (1), 491. <https://doi.org/10.1186/s12913-017-2319-8>

- Friganović, A., Selić, P., Ilić, B., & Sedić, B. (2019). Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. *Psychiatria Danubina*, 31(Suppl 1), 21–31.
- Goga, I. B. (2020). Can physiotherapy be recommended within the complex treatment of stomatized patient? *Journal of Physical Rehabilitation and Sports Medicine*, (2), 75-81.
- GoodTherapy.org, „Adlerian psychology/Psychotherapy.” (2022, 10th february). <https://www.goodtherapy.org/learn-about-therapy/types/adlerian-psychology>
- Herdea, V., & Brinza, I.L.(2018). *Bucharest. Burnout system*. Almatea medical publishing house
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of consulting and clinical psychology*, 78(2), 169–183. <https://doi.org/10.1037/a0018555>
- Junaković, I. T., & Macuka, I. (2021). Job demands, job control, and social support as predictors of job satisfaction and burnout in Croatian palliative care nurses. *Arhiv za higijenu rada i toksikologiju*, 72(3), 225–231. <https://doi.org/10.2478/aiht-2021-72-3556>
- Lacy, B. E., & Chan, J. L. (2018). Doctor burnout: The hidden care crisis of health. *Clinic Gastroenterology and hepatology: official journal of clinical practice of the American Gastroenterology Association*, 16(3), 311-317. <https://doi.org/10.1016/j.cgh.2017.06.043>
- Loscalzo, Y., & Giannini, M. (2019). Heavy study investment in Italian college students. An analysis of Loscalzo and Giannini's (2017) studyholism comprehensive model. *Frontiers in Psychiatry*, 10, 489. <https://doi.org/10.3389/fpsy.2019.00489>
- Luca, L., Ciubara, A. B., Antohe, M. E., Peterson, I., & Ciubara, A. (2022). Social media addiction in adolescents and young adults-Psychoeducational aspects. *Arhiv Euromedica*, 12, Special Issue. DOI 10.35630/2022/12/psy.ro.16
- Malhi, G.S, Bassett D., Boyce, P., Bryant, R., Fitzgerald, P.B., Fritz, K., Hopwood, M., Lyndon, B., Mulder, R., Murray, G., & Porter, R. (2015). Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for mood disorders. *Australian & New Zealand Journal of Psychiatry*. 49(12):1087-206.
- Maslach, C., & Leiter, M.P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-11. doi: 10.1002/wps.20311.
- Morgantini, L. A., Naha, U., Wang, H., Francavilla, S., Acar, Ö., Flores, J. M., Crivellaro, S., Moreira, D., Abern, M., Eklund, M., Vigneswaran, H. T., &

- Weine, S. M. (2020). Factors contributing to healthcare professional burnout during the COVID-19 Pandemic: A rapid turnaround global survey. *medRxiv : the preprint server for health sciences*, 2020.05.17.20101915. <https://doi.org/10.1101/2020.05.17.20101915>
- Moscu, C. A., Anghel, M., Dragomir, L., Munteanu, S., Anghel, A., Nechita, A., & Ciubară, A. (2021). Emotional exhaustion and professional satisfaction during Covid-19 pandemic at the level of emergency department staff. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(2), 265-278.
- Patel, R. S., Bachu, R., Adike, A., Malik, M., & Shah, M. (2018). Factors related to physician burnout and its consequences: A review. *Behavioral sciences (Basel, Switzerland)*, 8(11), 98. <https://doi.org/10.3390/bs8110098>
- Rădulescu, I. D., Ciubara, A. B., Moraru, C., Burlea, S. L., & Ciubara, A. (2020). Evaluating the impact of dissociation in psychiatric disorders. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(3Sup1), 163-174
- Ruiz-Fernández, M. D., Ortíz-Amo, R., Ortega-Galán, Á. M., Ibáñez-Masero, O., Rodríguez-Salvador, M., & Ramos-Pichardo, J. D. (2020). Mindfulness therapies on health professionals. *International journal of mental health nursing*, 29(2), 127–140. <https://doi.org/10.1111/inm.12652>
- Salinsky J. (2013). Balint groups and the Balint method. Grupurile Balint si metoda Balint « Societatea Balint
- Silistraru, I., Ciureanu, A.I., Ciubara, A., & Olariu, O., (2021). Prevalence of burnout in medical students in Romania during covid-19 pandemic restrictions (preliminary data). *Arhiv Euromedica*, 11(5), 12-15, DOI: 10.35630/2199-885X/2021/11/5.3
- Sîrghie, R. E. (2017). The study of certain psychological and organizational factors – amplifiers of occupational stress at the ICU department staff. *Romanian Medical Journal*, 64(3).
- Sîrghie, R. E., & Iamandescu, I. B. (2016). Evaluation and activation of antidistress resources at ICU staff – premise of burnout syndrome prevention. *Romanian Medical Journal*, 63(2).
- The European Commission, Comisia Europeană, The General Department of Employment, Social Affairs and Inclusion, (2014). *The risks towards work health and safety for workers in medical assistance field*, Publications Office. Ocuparea forței de muncă, afaceri sociale și incluziune (europa.eu)
- The Order of Nurses, Midwives and Medical Assistants in Romania. Official Gazette of Romania 404/2021. Official Gazette 404 dated 16th April 2021 (monitoruljuridic.ro)
- Velando-Soriano, A., Ortega-Campos, E., Gómez-Urquiza, J. L., Ramírez-Baena, L., De La Fuente, E. I., & Cañadas-De La Fuente, G. A. (2020). Impact of social support in preventing burnout syndrome in nurses: A systematic

- review. *Japan journal of nursing science: JJNS*, 17(1), e12269.
<https://doi.org/10.1111/jjns.12269>
- Wang, C., Grassau, P., Lawlor, P. G., Webber, C., Bush, S. H., Gagnon, B., Kabir, M., & Spilg, E. G. (2020). Burnout and resilience among Canadian palliative care physicians. *BMC palliative care*, 19(1), 169.
<https://doi.org/10.1186/s12904-020-00677-z>
- West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet (London, England)*, 388(10057), 2272–2281.
[https://doi.org/10.1016/S0140-6736\(16\)31279-X](https://doi.org/10.1016/S0140-6736(16)31279-X)
- World Health Organization, 2019, Burn-out an "occupational phenomenon": International Classification of Diseases, [Burn-out an "occupational phenomenon": International Classification of Diseases \(who.int\)](https://www.who.int/classifications/icd-11/burnout)
- Worther, M., & Cash E. (2022). *Stress management*. In: StatPearls. Treasure Island (FL): StatPearls Publishing
<https://www.ncbi.nlm.nih.gov/books/NBK513300/>
- Wright, A. A., & Katz, I. T. (2018). Beyond burnout - redesigning care to restore meaning and sanity for physicians. *The New England journal of medicine*, 378(4), 309–311. <https://doi.org/10.1056/NEJMp1716845>
- Yazdankhahfard, M., Haghani, F., & Omid, A. (2019). The Balint group and its application in medical education: A systematic review. *Journal of education and health promotion*, 8, 124. https://doi.org/10.4103/jehp.jehp_423_18