Burnout in COVID-19 era - a literature review

Magdalena Leśniewska¹, Ilona Kozioł¹, Julia Budzyńska¹, Joanna Milanowska²

Magdalena Leśniewska¹, ORCID: 0000-0001-8519-7655, e-mail: magdalenagim16@gmail.com
Ilona Kozioł¹, ORCID: 0000-0003-3154-5356 e-mail: ilona.koziol9@gmail.com
Julia Budzyńska¹, ORCID: 0000-0002-2737-1069, e-mail: julciab42@gmail.com
der n. o zdr. Joanna Milanowska², ORCID: 0000-0001-9741-1583, e-mail: joannamilanowska@umlub.pl

1. Student Scientific Circle on Chair and Department of Applied Psychology, Medical University of Lublin
2. Chair and Department of Applied Psychology, Medical University of Lublin

Abstract

BACKGROUND: The COVID-19 pandemic brought changes to daily life of many people. One of those affected by the global pandemic arena was work life. One of the results is burnout due to new challenges and stress associated with them. The most exposed occupational group were healthcare workers as the frontline in the fight against the virus, but not only this group could experience burnout due to the pandemic.

AIM OF THE STUDY: The aim of this study was to review the most recent available literature on burnout associated with COVID-19. PubMed, SCOPUS, and Google Scholar databases were reviewed. The Phrase "burnout and covid" was used to search the database. Search criteria were: all open access, 2020 and 2021, psychology and English. After Screening titles and abstracts 21 articles were analyzed in detail.
RESULTS: Many studies have shown that healthcare workers experienced burnout. The most vulnerable group were young, female nurses working with COVID-19 patients. Burnout was also observed among parents, who started working remotely from home or who had to commute to their workplace despite the pandemic. Remote schooling also contributed to burnout among students and teachers.

SUMMARY AND CONCLUSIONS: To reduce the possibility of experiencing burnout there are several actions that could be taken. First of all a positive attitude and task oriented actions are helpful in coping in new, stressful situations. Other solutions are social support and psychotherapy.

Keywords: COVID-19 pandemic; burnout;

Introduction

Occupational burnout is an entity that is in the latest WHO classification (ICD-11). It is defined as an occupational disease characterized by emotional exhaustion resulting from the stress experienced at work and its negative perception. According To Maslach and Jackson, it has three dimensions: emotional exhaustion, cynicism, and reduced work effectiveness. It's still a matter of debate whether it should be treated as a unidimensional or multidimensional construct as there are different studies and opinions among burnout researchers. The basic element remains exhaustion [1,2,3].

Although there is evidence of the impact of coronavirus on the general mental health and well-being of the public, little is known about the mechanism that may help uncover the link between coronavirus stress and burnout in medical staff. Occupational burnout is identified as a psychological syndrome originating from a prolonged response to interpersonal stressors, mainly at work. Burnout is a complex and multidimensional phenomenon that includes emotional exhaustion, depersonalization, and limited personal achievement [4].

There are many professions that are associated with the above cases of burnout among employees. Many of these professions depend on contact with the public, such as health professionals, veterinarians, civil defense and emergency services. The stressful effects of this type of work are cited as being related to external scrutiny, for example with colleagues, customers/clients or supervisors. In the COVID-19 pandemic, interdependence is crucial. Frontline workers depend on the public to follow public health guidelines to prevent the spread of the virus, thereby reducing potential workload or otherwise reducing the stressful conditions of their work. Importantly, in this context we have seen evidence that the wider socio-cultural environment plays a key role in employees' feelings of job satisfaction. One can surmise that these broader influences on burnout occur in many professions [5].

Due to the current COVID-19 pandemic, health care professionals are additionally forced to cope with the traumatic experiences of patients and the unexpected loss of their families, friends and colleagues. This situation can have an impact on the occurrence of psychological stress and, consequently, the risk of professional burnout [6].
Aim of the study

The purpose of this study was to review the most recent available literature on burnout associated with COVID-19. For this purpose, the PubMed, SCOPUS, and Google Scholar databases were reviewed. The phrase "burnout and covid" was used to search the database. Search criteria were: all open access, 2020 and 2021, psychology and English. 62 results were obtained. After Screening titles and abstracts 21 articles were analyzed in detail.

Tools used to measure burnout associated with COVID-19

A number of tools, questionnaires were used to assess the prevalence and severity of burnout during the COVID-19 outbreak, which provided an easy and non-contact way to conduct such analysis.

The main tool for measuring the job burnout scale is the MBI-GS. It is a questionnaire proposed by Maslach and Jackson in 1981 and consists of 15 items assessing the above described three areas of job burnout on a scale from 0 = never to 6 = daily. The final scores are divided into low, moderate and high scores. In a study of 606 Chinese health care workers, 36.5% of them met the criteria for burnout with burnout being more common in women. The most vulnerable group were young women with short work experience, lower income per family burdened by disease, having a family member with COVID-19 and also those in the nursing profession. Interestingly, COVID-19 own illness or daily hours spent at work were not factors in differentiating groups of employees without burnout from those with burnout. It has been shown that the occurrence of professional burnout syndrome is in correlation with the presence of depressive symptoms [1,7,8]. Another tool used in burnout research was the PCL-C questionnaire, which assesses symptoms of post-traumatic stress disorder (PTSD) in the general population. It consists of 17 items corresponding to the symptoms of PTSD according to DSM-5. Using a 5-point scale, respondents indicated how much each symptom had bothered them in the past month. Symptoms were associated with a traumatic stressor. GAD-7 was used for use in primary care patients. This is a self-report questionnaire that identifies symptoms of generalized anxiety disorder. Respondents are asked about experiencing anxiety-related problems in the past two weeks, answering seven items on a 4-point scale. The CESQT was used to assess the level of burnout in different types of work. It consists of 20 items in a four-factor structure: Enthusiasm towards work, Psychological exhaustion, Indolence, Guilt. The answer key is a five-point Likert scale from 0 "never" to 4 "very often " [9].

COVID-19 Burnout Scale (COVID-19-BS) is a scale developed by Yıldırım and Solmaz (2020) that consists of 10 items and each item is rated with a 5-point Likert type scale ranging from 1 = never to 5 = always. A sample item is "When you think about COVID-19 in general, how often do you feel hopeless?"[8] 3. Some changes were made to the COVID-19-BS scale, the wording of the original burnout scale items was modified, such as replacing "Your job" with "COVID-19" and the response format accordingly [3].
The study by Merve Özarslan and Secil Caliskan, which was preceded by a pilot study tested the applicability of the questionnaire. A questionnaire was used which consisted of two parts, the first part contained 29 demographic questions and questions about the participants' situation before and during the pandemic. The second part of the questionnaire used the 22-question Maslach Burnout Inventory (MBI)[10]. To survey Italian healthcare professionals, online questionnaires were used, which respondents completed through Google Forms, including the Maslach Burnout Inventory (MBI), Resilience Scale, and Intolerance of Uncertainty Scale Short Form (IU)[6]. In contrast, Portuguese researchers to examine burnout levels in doctors and nurses during the COVID-19 outbreak also used an online survey that was created using Qualtrics and distributed via Facebook and LinkedIn. A link to the study was also available on the Portuguese Association of Psychologists website [11].

In a study on medical students who had to study online through the COVID-19 outbreak, an online survey was sent out. The Liana version of the Maslach Burnout Inventory (MBI) and the Social Support Rating Scale (SSRS) were used to assess burnout in medical students and young medics [12].

**Burnout among healthcare workers**

The relationships between dimensions of burnout and some psychological characteristics (resilience, intolerance of uncertainty and coping styles) were investigated on a group of Italian GPs (120). GPs have faced a huge number of interventions without having clear management guidelines or prevention methods. These physicians were characterized by a high sense of competence and job performance with concomitant emotional exhaustion. Analysis of the results of the questionnaires completed by the study group allowed for the division into two groups: medium risk of professional burnout and high risk of professional burnout. The group of GPs at average risk of burnout had relatively high levels of emotional exhaustion, but average levels of depersonalisation or sense of professional fulfilment. In contrast, the group at high risk for burnout was characterized by moderate levels of emotional exhaustion and depersonalization, but very low levels of job satisfaction. Additionally, greater involvement of emotional coping mechanisms as well as strategies for avoiding uncertain situations or reacting to them with paralysis. Analysis of psychological traits showed that just such a coping model, emotional coping, was associated with a less effective response to emergencies. An important element of coping in such a situation is resilience, understood as the ability to cope with an unforeseen, unknown, difficult situation such as the COVID-19 pandemic. It affects your ability to work effectively [13]. Brazilian study found that a group of health care workers had a lower mean on the indolence factor and lower levels of burnout compared to the other groups. The group of health care workers struggling with COVID-19 showed higher levels of anxiety and mental exhaustion than the other groups (non-COVID-19 health care workers, non-health care workers). Interestingly, the overall scores for job burnout and post-traumatic stress showed no statistically significant differences and anxiety was the most differentiating factor. Employees struggling on the front lines are characterized by greater anxiety about the future [9].
Among Italian health care workers, those at high risk of burnout had lower resilience and greater difficulty coping with the uncertainty associated with the current SARS-CoV-2 outbreak than the low burnout risk group [6]. Studies show that in the United States, about 54.4% of physicians reported at least one symptom of burnout in the form of emotional exhaustion, depersonalization, or decreased sense of accomplishment during the COVID-19 pandemic [10]. In a study by Michel Di Trani and Rachele Mariani, about 20% of respondents reported high levels of emotional exhaustion and 7% reported high levels of depersonalization, while 44% of health care workers reported high levels of personal accomplishment. Thus, it seems that still quite a large group of respondents may be able to find satisfaction from their work, which may be an important protective factor for the mental health of these employees [6]. Perfectionism is a key personality variable during outbreaks because it can be linked to obsessive-compulsive traits that increase and can be a way of coping with anxiety and fear of contagion [14]. The available literature suggests that high levels of social connectedness may help individuals cope with anxiety and depression, which may have a particular impact during the COVID-19 pandemic [4].

**Risk factors**

Many studies show that the level of burnout among dentists was a significant problem even before the epidemic, factors that increase the frequency of burnout include: work environment, repetitive tasks, risk of medical error, close contact with patients, patient anxiety, long hours, job dissatisfaction, responsibility for patients, working with unqualified dental assistants, uncomfortable work posture and work environment, and economic pressures. Now, the added stress of working during the COVID-19 pandemic may have the effect of reducing burnout resistance in dentists, as it does in other health professionals. Some of the increased risk factors caused by the current pandemic situation include: lack of appreciation, role confusion due to working in positions outside of departments, and loss of control over work life. Furthermore, new work rules and procedures, increased stress on both staff and patients, and exposure to infected individuals (staff or patient) in the workplace can be a source of burnout [10]. Several studies have shown that health care workers may be perceived as potential carriers of COVID-19, which was initially associated with isolation from other individuals. And the increased workload in the dangerous atmosphere of a pandemic has caused their mental health to deteriorate [6]. In a study conducted on Chinese people, it was found that the prevalence rates of stress and anxiety are much higher (more than 25%) during the COVID-19 pandemic. Excessive stress can cause many psychosocial and psychological problems such as anxiety, affective disorders and professional and social burnout [3].

In a study that determined burnout levels among health care workers during the yester-year COVID-19 pandemic, women showed higher levels of emotional exhaustion than men. Moreover, significant differences were observed in levels of depersonalization according to gender; additionally, stress levels were significantly higher in women, except for occupational stress [10]. Thus, female gender may also be an important factor for increased risk of burnout. A greater risk of burnout was also noted among married workers than among single health care workers [7].
According to Southwick and Southwick (2020), social bonding is a basic need for every human being, the loss of which can result in an increased risk of burnout. A study by Rasdi RM and co-authors also found that financial uncertainty negatively affected their work engagement and productivity [8].

In a population of Turkish adults during the COVID-19 pandemic, a study found that the level of resilience plays a key role in the occurrence of stress and burnout. It has been indicated that stress can directly or indirectly, by reducing immunity and thus significantly increase burnout symptoms during a pandemic. Thus, the more people experience stress, the greater the level of burnout caused by the lack of relief from stressful situations, which is the current epidemic situation [3].

**Burnout among non-healthcare workers**

There are many professions that carry a higher risk of burnout. Although healthcare workers were the most exposed to the threat of COVID occupational burnout during the pandemic period, it could also affect those not associated with direct pandemic management.

One of the groups at risk of burnout are employees working night shifts. During the COVID-19 pandemic, many are facing poorer working conditions. In addition, Moonlighters are burdened with being in a constant state of uncertainty due to both the uncertainty of keeping their jobs and the associated financial instability. When employees perceive instability in their employer-employee relationship, they respond by withdrawing from work. Combined with other accompanying emotions during this time including but not limited to elevated levels of anger, frustration, and other negative feelings, employees’ ability to maintain a positive motivational-affective state is reduced. In light of these limitations, COVID-19 significantly exposed night shift workers to a greater risk of burnout, which is also associated with leaving their jobs [8].

The new working conditions also had a major impact on education. Regarding job burnout among teachers - younger teachers with experience showed high levels of personal satisfaction. This may be due to adapting to digitization and behind that having the right skills to work remotely. Elevated levels of job burnout and especially depersonalization were exhibited by elementary school teachers. These symptoms were exacerbated in the presence of students with disabilities; this was probably due to the teacher's difficulty in engaging students with disabilities in distance learning. Results show that overall burnout increased and personal achievement decreased during the pandemic. The likely cause is the initial loss of ability to manage behaviour in physical proximity, and because of the distance, the experience of uncertainty about how to manage behaviour online felt by teachers [15].

**Academic burnout and COVID-19**

The risk of burnout during a pandemic not only increases among employees, but can also affect students. Anxiety and burnout levels in high school students likely increased due to the quarantine, which meant these students could not attend their educational classes at school and had to prepare for exams individually at home. A significant association between anxiety and burnout was also observed in students taking exams in Spain, in a post-COVID-19 shutdown situation. The study confirms that exposure to anxiety can persist for long periods of time, even months [16].

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A study that was conducted on medical students in China suggests that the COVID-19 outbreak may contribute to the increased prevalence of student burnout in the group presented. Online learning during this period contributed significantly to the occurrence of this phenomenon. It also proved that the prevalence of professional/student burnout and its severity were higher among students in higher years of study. Burnout rate in graduates (63.6%) also exceeded the level of burnout found in students who had not yet graduated (45.2%) [12].

Family burnout and COVID-19

Many factors such as home quarantine and the economic crisis caused by it during the COVID-19 outbreak affected the welfare of families. They have also caused increased parental responsibilities including educational responsibilities to children due to school closures and online learning. A survey of families in the United States and the United Kingdom found that housework, childcare responsibilities, and the role of teaching children put a strain on parents, especially mothers. Such situations increase the risk of negative mood symptoms, depression, anxiety and stress in parents as well as symptoms of parental burnout [17].

An additional stressor for parents who do not work remotely is bringing home an infection from the workplace. Taking care of seniors is also an additional source of responsibilities plus there is also the concern for their health and life. Interestingly, all dimensions of parental burnout (exhaustion, emotional distancing, contrast) increased from the time of the first to the second wave, except saturation. Burnout in all these dimensions was higher in mothers than in fathers. Nevertheless, the level of exhaustion in mothers between waves was stable, whereas it increased significantly in fathers [18,19]. The reason may be that women are more involved in raising children and more likely to put children's needs before their own [20]. This sense of efficacy, special to women, in dealing with such challenges may have protected them from feeling even more overwhelmed by the demands of the new situation, which in men may have caused a sense of exhaustion. The situation was new to them, the men had not developed coping mechanisms to deal with such a burden. Although men could objectively still do less than their female partners, they felt that the parental role was draining their emotional resources like never before. These findings may complement previous studies that have shown that fathers are more likely to experience burnout, even before the risks outweigh their resources, because they use up a lot of their resources in new situations [18,21,17].

Ways to combat burnout

An optimistic person usually has a positive expectation for the future, which in turn generates positive energy in the person to deal with challenges effectively. Among medical staff, optimism raises levels of positive functioning, satisfaction with patient management and patient outcomes. Optimistic healthcare professionals feel less pressure, use more problem-focused solutions, seek clear social support, and have more trust in people and organizations. Optimism is a coping strategy that is useful in managing stress and promoting well-being and mental health in the face of adversity.
Evidence from the COVID-19 context supports a mediating role for optimism in the relationship between coronavirus stress and depression, anxiety, and somatization. Higher optimism was also associated with less work stress and emotional exhaustion in healthcare workers. These results suggest that optimism is an important construct for predicting and promoting mental health during disasters [4].

Ideas that can help reduce burnout include, for example, creating up-to-date guidelines specific to the unite here health care professionals work, providing adequate and accessible personal protective equipment, and increasing the number of support and administrative staff for non-specialist tasks, e.g. administrative, to reduce the burden on physicians, and ensuring the safety and health of all staff by periodically examining vital signs, detection of signs of infection and signs of burnout. Psychiatric support would need to be provided in addition to these screenings [10].

A way to reduce the incidence of burnout may be to implement appropriate psychological support resources to help those individuals who are exposed to crisis situations on a daily basis and provide them after the crisis is over. Such activities can improve stress management skills [6].

Ways of coping with professional and also student burnout in case of medical students include social support, which can act as a protective against burnout symptoms. Help from friends and family can also be a positive influence. According to Lazarus' theory, active communication plays a key role in alleviating stress, which is one of the main reasons why burnout occurs [12].

**Psychotherapy in burnout**

Psychotherapists now face a very important task. The problems faced by both previously managed and new patients are new, related to the unique situation of a worldwide pandemic. Predicting these concerns in the patient population would be helpful to them. Patients and therapists may share the experience of the virus and may struggle with similar issues, e.g., an elderly family member hospitalized in an intensive care unit under a ventilator. This provides a basis for considering additional supervisor support or additional self-therapy. E-visits are a new form of meeting with a therapist through tele-visits. Telemedicine solutions allow the continuation of therapy while maintaining a sanitary regime. The challenge of therapy in the era of COVID-19 is to adapt the patient's individual therapy process to intervention caused by the emergence of new pandemic crises, such as job loss or death of a loved one and the experience of domestic violence. The new form of therapy is also challenging. Especially in AEDP therapy, where in order to reduce the patient's sense of loneliness, the therapist is a non-neutral figure approaching the patient emotionally.

The shift to a non-contact form makes it impossible to read the patient's body language, which also makes it difficult to develop and maintain a relationship between patient and therapist. In such a situation, the therapist should ask the patient how he or she feels about the new way of meeting and receiving therapy while at home. Phone calls may focus attention on the patient's tone of voice, but it makes it impossible to read emotions expressed with facial expressions.
Other elements of AEDP therapy during a pandemic include learning how the patient feels about the fact that the therapist may be experiencing similar emotions. The AEDP appears to be response to the fear, sadness, sense of isolation and loneliness characteristic of the current situation [22].

**Summary and conclusion**

New world’s situation brought a lot of changes into people’s lives. Challenges which have to be faced by many people are draining their emotional resources. They often exceed the capability of coping with problems. Studies have shown that a task-oriented model is better than being emotional in solving new problems and coping with new responsibilities. Burnout was experienced by many people of many professions. Healthcare workers are working under enormous pressure. That can be tough to handle by nurses, doctors, paramedics etc. with little work experience.

Those who are not directly handling the COVID-19 situation also suffer from burnout. Parents and children are constantly sharing the same space as schools are closed and work is changed for the remote. The level of stress caused by fear of the coronavirus is high.

This work sums up some of the aspects of the burnout problem. Tasks for the future may include creating a psychological support system for healthcare professionals, creating guidelines and social support for students.
References

1. Huo L, Zhou Y, Li S, Ning Y, Zeng L, Liu Z, Qian W, Yang J, Zhou X, Liu T, Zhang XY. Burnout and Its Relationship With Depressive Symptoms in Medical Staff During the COVID-19 Epidemic in China. Front Psychol. 2021 Mar 4;12:616369. doi: 10.3389/fpsyg.2021.616369.

2. Maslach, C. and Jackson, S.E. (1981), The measurement of experienced burnout. J. Organiz. Behav., 2: 99-113. doi:10.1002/job.4030020205.

3. Yıldırım M, Solmaz F. COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 Burnout Scale. Death Stud. 2020 Sep 11;1-9. doi: 10.1080/07481187.2020.1818885.

4. Yıldırım M, Çiçek İ, Şanlı ME. Coronavirus stress and COVID-19 burnout among healthcare staffs: The mediating role of optimism and social connectedness. Curr Psychol. 2021 Apr 23;1-9. doi: 10.1007/s12144-021-01781-w.

5. Sumner RC, Kinsella EL. "It's Like a Kick in the Teeth": The Emergence of Novel Predictors of Burnout in Frontline Workers During Covid-19. Front Psychol. 2021;12:645504. Published 2021 May 25. doi:10.3389/fpsyg.2021.645504.

6. Di Trani M, Mariani R, Ferri R, De Berardinis D, Frigo MG. From Resilience to Burnout in Healthcare Workers During the COVID-19 Emergency: The Role of the Ability to Tolerate Uncertainty. Front Psychol. 2021 Apr 16;12:646435. doi: 10.3389/fpsyg.2021.646435.

7. Çelmeçe N and Menekay M (2020) The Effect of Stress, Anxiety and Burnout Levels of Healthcare Professionals Caring for COVID-19 Patients on Their Quality of Life. Front. Psychol. 11:597624. doi: 10.3389/fpsyg.2020.597624.

8. Rasdi RM, Zaremohzzabieh Z, Ahrari S. Financial Insecurity During the COVID-19 Pandemic: Spillover Effects on Burnout-Disengagement Relationships and Performance of Employees Who Moonlight. Front Psychol. 2021;12:610138. Published 2021 Feb 18. doi:10.3389/fpsyg.2021.610138.

9. Paula Salvador, A. et al. Impact of anxiety, stress, and burnout symptoms in Brazilian health professionals during the COVID-19 pandemic. Archives of Psychiatry & Psychotherapy, [s. l.], v. 23, n. 1, p. 7–13, 2021. doi: 10.12740/APP/133639.

10. Özerslan M, Caliskan S. Attitudes and predictive factors of psychological distress and occupational burnout among dentists during COVID-19 pandemic in Turkey. Curr Psychol. 2021 Apr 29:1-12. doi: 10.1007/s12144-021-01764-x.

11. Correia I, Almeida AE. Organizational Justice, Professional Identification, Empathy, and Meaningful Work During COVID-19 Pandemic: Are They Burnout Protectors in Physicians and Nurses? Front Psychol. 2020 Dec 11;11:566139. doi: 10.3389/fpsyg.2020.566139.

12. Zhang JY, Shu T, Xiang M, Feng ZC. Learning Burnout: Evaluating the Role of Social Support in Medical Students. Front Psychol. 2021 Feb 22;12:625506. doi: 10.3389/fpsyg.2021.625506.

13. Di Monte C, Monaco S, Mariani R and Di Trani M (2020) From Resilience to Burnout: Psychological Features of Italian General Practitioners During COVID-19 Emergency. Front. Psychol. 11:567201. doi: 10.3389/fpsyg.2020.567201.
14. Spagnoli P, Buono C, Kovalchuk LS, Cordasco G, Esposito A. Perfectionism and Burnout During the COVID-19 Crisis: A Two-Wave Cross-Lagged Study. Front Psychol. 2021;11:631994. Published 2021 Feb 1. doi:10.3389/fpsyg.2020.631994.

15. Pellerone, M. Self-Perceived Instructional Competence, Self-Efficacy and Burnout during the Covid-19 Pandemic: A Study of a Group of Italian School Teachers. Eur. J. Investig. Health Psychol. Educ. 2021, 11, 496-512. doi:10.3390/ejihpe11020035.

16. Fernández-Castillo A. State-Anxiety and Academic Burnout Regarding University Access Selective Examinations in Spain During and After the COVID-19 Lockdown. Front Psychol. 2021 Jan 27;12:621863. doi: 10.3389/fpsyg.2021.621863.

17. Seyyedeh Fatemeh Mousavi. Psychological Well-Being, Marital Satisfaction, and Parental Burnout in Iranian Parents: The Effect of Home Quarantine During COVID-19 Outbreaks. Front Psychol. 2020 Dec 03. doi:10.3389/fpsyg.2020.553880.

18. Aguiar, J., Matias, M., Braz, A.C., Cézar, F., Coimbra, S., Gaspar, M.F. and Fontaine, A.M. Parental Burnout and the COVID-19 Pandemic: How Portuguese Parents Experienced Lockdown Measures. Fam Relat. 2021. doi: 10.1111/fare.12558.

19. Coyne LW, Gould ER, Grimaldi M, Wilson KG, Baffuto G, Biglan A. First Things First: Parent Psychological Flexibility and Self-Compassion During COVID-19. Behav Anal Pract. 2020 May 6:1-7. doi: 10.1007/s40617-020-00435-w.

20. Filipa César, Patrício Costa, Alexandra Oliveira, Anne Marie Fontaine. To Suffer in Paradise”: Feelings Mothers Share on Portuguese Facebook Sites. Front Psychol. 2018; 9: 1797. doi: 10.3389/fpsyg.2018.01797.

21. Mousavi SF. Psychological Well-Being, Marital Satisfaction, and Parental Burnout in Iranian Parents: The Effect of Home Quarantine During COVID-19 Outbreaks. Front Psychol. 2020 Dec 3;11:553880. doi: 10.3389/fpsyg.2020.553880.

22. Hillary L. McBride, Andrew J. Joseph, Peter G. Schmitt & Brett M. Holtz. Clinical recommendations for psychotherapists working during the coronavirus (COVID-19) pandemic through the lens of AEDP (Accelerated Experiential Dynamic Psychotherapy). Counselling Psychology Quarterly .doi: 10.1080/09515070.2020.1771283.