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Secondary Traumatic Stress in Mental Health Professionals

Ruh Sağlığı Çalışanlarında İkincil Travmatik Stres

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ABSTRACT

Mental health professionals working with traumatic stress may experience post-traumatic stress disorder symptoms, similar to their patients. For these professionals, secondary traumatic stress can be an important concept. It involves emotions, thoughts, and actions that emerge when a mental health worker becomes aware of a catastrophic event experienced by someone familiar, valued, and connected. In the literature, terms such as vicarious trauma, occupational burnout, and compassion fatigue are associated with secondary traumatic stress. Growing research presents that secondary traumatic stress is associated with personal trauma history, temperament, type of coping with stress, and levels of social support. The aim of this paper is to review and present the current situation of secondary traumatic stress and related concepts in mental health workers such as psychiatrists, psychologists, psychiatry nurses, social workers, and so forth. In Türkiye, where several traumatic experiences (such as earthquake) are currently common, studying secondary traumatic stress in mental health workers is also significant. Healthy coping strategies, a resilient personality, and the display of signs of post-traumatic growth can contribute to the psychological well-being of mental health professionals. In this investigation the concept of secondary traumatic stress in mental health professionals, associated factors with this concept, coping mechanisms of secondary traumatic stress are explained in the light of the literature. Based on the emerging research, some recommendations are stated.
Keywords: Secondary trauma, mental health professionals, post-traumatic growth, post-traumatic depreciation

ÖZ

Travmatik stresle çalışan ruh sağlığı profesyonelleri, çalıştıkları kişilerle benzer şekilde travma sonrası stres bozukluğu belirtileri yaşayabilirler. Bu profesyoneller için ikincil travmatik stres önemli bir kavramdır. İkincil travmatik stres, bir ruh sağlığı çalışanının tanıdığı, değer verdiği ve profesyonel ilişki kurduğu bir kişinin yaşadığı travmatik bir olayın farkına vardığında ortaya çıkan duygular, düşünceler ve davranışları içerir. Alanyazında, ikincil travmatik stres ile ilişkilendirilen terimler arasında temsili/üstlenilmiş travma, mesleki tükenmişlik, merhamet yorgunluğu ve karşı aktarım bulunmaktadır. Artan araştırmalar, ikincil travmatik stresin kişisel travma geçmişi, mizaç, stresle başa çıkma türü ve sosyal destek düzeyleri ile ilişkili olduğunu göstermektedir. Bu makalenin amacı, psikiyatristler, psikologlar, psikiyatri hemşireleri, sosyal hizmet uzmanları ve benzeri ruh sağlığı çalışanlarında ikincil travmatik stres ve ilgili kavramların mevcut durumunu gözden geçirmek ve güncel çalışmaları sunmaktır. Deprem gibi çeşitli travmatik deneyimlerin yaygın olduğu Türkiye'de, ruh sağlığı çalışanlarında ikincil travmatik stresin incelenmesi de önemlidir. Sağlıklı başa çıkma stratejileri, dayanıklı bir kişilik ve travma sonrası büyüme belirtilerinin gösterilmesi, ruh sağlığı profesyonellerinin psikolojik iyi oluşuna katkıda bulunabilir. Bu incelemede, ruh sağlığı profesyonellerinde ikincil travmatik stres kavramı, bu kavramla ilişkili faktörler, ikincil travmatik stresle başa çıkma mekanizmaları alanyazın ışığında açıklanmıştır. Ortaya çıkan araştırmalara dayanarak bazı öneriler belirtilmiştir.
Anahtar sözcükler: İkincil travma, ruh sağlığı çalışanları, travma sonrası büyüme, travma sonrası yıpranma

Introduction

Mental health professionals such as psychiatrists, psychologists, psychiatry nurses, social workers are not immune to the traumatic effects they encounter in their work (Newell and MacNeil 2010, Kahil and Palabıyıkoğlu 2018a). Because their job requires to form contact and alliance to provide guidance, therapy, and assistance to survivors of trauma, they are influenced by the scope of their work. Although the definition of trauma does not include this type of indirect exposure to trauma (APA 2013), mental health workers are seriously influenced by forming alliance with trauma survivors and listening to graphic details of their trauma (Salston and Figley 2003). The definition of trauma in post-traumatic stress disorder includes encountering

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frequent or intense exposure to distressing aspects of the traumatic incident(s) (such as first responders handling human remains or police officers consistently confronted with details of child abuse) in DSM-5 indicating a direct exposure to traumatic events or remains. Mental health workers are not exposed to traumatic events or remains directly, but they are influenced by traumatic events because they are immersed into the details of the traumatic event, and because they also form an emotional bond with the survivor and victim of trauma. Secondary traumatic stress can occur when psychologists are exposed to traumatic experiences through listening to others' traumatic experiences and can lead to similar symptoms to post-traumatic stress disorder (Figley 1995, Bride 2007).

Exposure to trauma as part of their job can cause traumatic stress relatively quickly (Figley, 1995). Additionally, mental health workers can accumulate traumatic stress over time (Pearlman and Saakvitne, 1995, Branson 2019). The manifestation of traumatic stress can be different, secondary traumatic stress is similar to the symptomatology of post-traumatic stress disorder (PTSD) in the way that mental health workers experience intrusions and re-experiencing of the event that they have not directly lived. They can also suffer from arousal and avoidance symptoms, sleep disturbance and negative changes in cognition, attention, and emotion. (Figley 1995, APA 2013). Secondary traumatic stress refers to the feelings, cognitions, and behaviors that arise from being aware of a devastating event. This event may involve someone known, valued, or related being exposed to trauma. Similar to post-traumatic stress disorder or acute stress disorder in individuals directly exposed to trauma, secondary exposure to trauma can lead to avoidance or reliving reactions, as well as negatively affect the quality of daily life (Figley 1995, Bride 2007, Kahil and Palabıyıkoğlu 2018a, 2018b, Tsirimokou et al. 2023).

The text explores how mental health professionals can still be significantly affected by their work with trauma survivors, despite not directly experiencing trauma themselves. This impact is due to the emotional bond formed and exposure to distressing details. It discusses the concept of secondary traumatic stress; wherein mental health workers can exhibit symptoms similar to post-traumatic stress disorder (PTSD) as a result of indirect exposure to trauma through their clients. Additionally, it highlights that this secondary exposure to trauma can have profound effects on the well-being and functioning of mental health professionals, impacting their quality of life.

Constructs Related to Secondary Traumatic Stress

There are many other forms of emotional, cognitive, and behavioral consequences of working with people who are trauma victims rather than secondary traumatic stress. These constructs are vicarious trauma, occupational burnout, compassion fatigue, and countertransference (Yilmaz 2021). These constructs are close to each other since they entail emotional strain in mental health workers; however, each is slightly different from others in terms of its type of effect, and development duration (Rauvola et al. 2019). Owing to the fact that these constructs are slightly different from each other, they might be confused.

Although used interchangeably with secondary traumatic stress, a conceptually related but different traumatic effect in mental health workers can build up over time is vicarious trauma (Pearlman and Saakvitne 1995). Professionals may experience vicarious traumatization through empathetic involvement with trauma survivors (Branson 2019, Pearlman and Saakvitne 1995). Unlike secondary traumatic stress, which shares similarities with PTSD symptoms and has a sudden onset, vicarious trauma impacts the belief system of mental health workers. It is not directly linked to PTSD symptomatology (Pearlman and Saakvitne 1995, Kounenou et al. 2023). Individuals forming interpersonal connections with victims of catastrophic events may find their beliefs about security, trust, dignity, intimacy, and control significantly affected (Pearlman and Saakvitne 1995, Branson 2019). Vicarious traumatization is characterized as a significant and enduring transformation in a caregiver's internal perception, arising from altered beliefs about themselves, relationships, and the world. Therefore, vicarious traumatization is apart from the more immediate occurrences of secondary traumatic stress and compassion fatigue (Rauvola et al. 2019).

Because of doing trauma-related lines of work, mental health workers are under the effect of empathy-based strain (Rauvola et al. 2019) that can also lead to occupational burnout (Newell and MacNeil 2010) and compassion fatigue (Yilmaz 2021). Due to the emotionally demanding nature of their interpersonal engagements within humanitarian aid, professionals in this field may experience a distinct form of job-related stress known as "occupational burnout" (Maslach and Jackson 1981; Leiter and Maslach 1988). Occupational burnout can be accompanied with depression, anxiety and health-related outcomes and decrease general wellbeing of mental health workers (Rauvola et al. 2019, Yilmaz 2021, Yücel and Akoğlu 2023). As it is understood, unlike vicarious trauma, occupational burnout does not related with drastic negative changes in belief system.

Professionals collaborating with trauma victims may experience additional challenges, such as compassion fatigue. This condition involves both emotional and physical exhaustion stemming from a deep understanding of the traumatic experiences faced by victims (Salston and Figley 2003, Rothschild and Rand 2006). Compassion fatigue is conceptualized as a two-dimensional construct including secondary traumatic stress and burnout (Rauvola et al. 2019, Yilmaz 2021). Although secondary traumatic stress sets up suddenly, burnout develops gradually through emotional exhaustion (Figley 1995). Several studies on compassion fatigue generally entail one dimension of compassion fatigue rather than referring to its multidimensional nature. Therefore, compassion fatigue is a broader consequence of working with trauma victims and it leads to the development of trauma-related symptoms and occupational burnout and hence general decrease in wellbeing.

Another potential consequence is countertransference, specifically traumatic countertransference, where therapists spontaneously or reactively respond to information, behaviors, and emotions exhibited by the traumatized client (Salston and Figley 2003). Such countertransference can impede psychotherapists in accurately diagnosing and treating trauma (Danieli 1996). Compared to other traumatic effect due to indirect involvement with traumatic content, countertransference is paid little attention. Providing care for individuals who have experienced trauma is intricate and often elicits intense countertransference (CT) emotions. These emotions are commonly mixed and distressing, potentially disrupting the therapeutic connection (Ligiéro and Gelso 2002, Silveira Júnior et al. 2012). It can be said that countertransference has a negative impact on the emotional world, just like the negative impact of vicarious trauma on the belief system of mental health workers about the world.

Secondary Traumatic Stress and Associated Factors

Secondary traumatic stress is considered an occupational hazard of providing direct services to victims or survivors of trauma, such as child welfare workers and social workers (Bride 2007, Sprang et al. 2011). Secondary traumatic stress is reported to have detrimental effects to sense of wellbeing and professional effectiveness of mental health care workers (Sprang et al. 2011). Mental health workers themselves are seriously affected by traumatic stress, and their services can also be negatively influenced due to secondary traumatic stress.

When the current literature is screened to see which factors are studied in conjuction with secondary traumatic stress in mental health workers, emergent studies reveal that secondary traumatic stress is associated with several individual factors such as personal trauma history, temperament, type of coping with stress and social support. Personal trauma history has been examined in several different studies (Hensel et al. 2015, Manning-Jones 2017, Diehm et al. 2019, Leung et al. 2022, Pellegrini et al. 2022, Yazıcı and Özdemir 2022). Many studies found that there is a positive association between personal trauma history and secondary traumatic stress among mental health workers (Leung et al. 2022, Pellegrini et al. 2022, Yazıcı and Özdemir 2022). However, the findings on the association between personal trauma history and secondary traumatic stress in mental health professionals seems conflicting (Diehm et al. 2019). For example, in a current study that included only psychologists in the sample, it was concluded that personal trauma history in psychologists did not correlate with secondary traumatic stress (Diehm et al. 2019). Rather they found that secondary traumatic stress was found to be related with social support and contact with traumatic clients. Similarly, a study involving clinical psychologists in training reported that personal trauma history was not associated with secondary traumatic stress (Makadia et al. 2017).

When these contradictory results are further elaborated, it is apparent that the definition and measurement of personal trauma history has changed and differentiated. For example, in Brewin et al.'s (2002) study, personal trauma history was assessed using the Trauma Screening Questionnaire; however, Diehm et al. (2017) assessed the degree of resolution of traumatic stress experienced while providing services to trauma victims for the operational definition of personal trauma history. As a result, personal trauma history cannot be reduced only to traumatic events experienced in the personal lives of psychologists. Due to these differences in definitions, personal trauma history was assessed using different measurement tools (Leung et al. 2022). For example, in their study reporting personal trauma history was associated with secondary traumatic stress, Yazıcı and Özdemir (2022) used the Life Events Checklist for DSM-5 (Weathers et al. 2013) and assessed traumatic stressors that psychologists experience in their lives. In sum, it is important that personal trauma history in mental health workers is not defined in the same way in each research study.

Regarding temperament, Rzeszutek and colleagues (2015) suggested that emotional reactivity was positively related to secondary traumatic stress in trauma therapists, whereas sensory sensitivity and social support were negatively related to secondary traumatic stress. Type of coping with stress has been investigated in a current

study in psychologists and it was revealed that self-confident approach is positively, whereas submissive and helpless coping is negatively associated with secondary traumatic stress in mental health care workers (Rzeszutek et al. 2015).

Another variable associated with secondary traumatic stress is social support. Social support has been reported as an important variable associated with secondary traumatic stress among mental health professionals (Rzeszutek et al. 2015, Mairean 2016, Manning-Jones et al. 2017, Diehm et al. 2019). All these studies yielded a negative association between social support and secondary traumatic stress. Furthermore, Diehm et al. (2019) added that social support act as a moderator in the relationship between trauma caseload size and secondary traumatic stress. These findings suggest that a stronger relationship exists between weekly trauma caseload size and secondary traumatic stress in psychologists with low social support than those with high social support. Manning-Jones et al. (2017) suggested psychologists reported less social support than those with nurses and social workers. Although psychologists report lower levels of social support than nurses, their field of work is different from that of nurses, as they have an ongoing relationship with trauma survivors and may therefore need less tangible social support.

Secondary traumatic stress is also related to organizational factors such as clinical supervision, caseload, and trauma training. Quinn et al. (2019) proposed that quality of the supervision relationship, caseload, the level of personal anxiety, and salary are associated with secondary traumatic stress. In addition, a positive perception of the supervision relationship, a low number of cases, low personal anxiety, and a higher salary were related to lower levels of secondary traumatic stress. In another study, high exposure to trauma and high clinical work-related stress were found to be associated with higher secondary traumatic stress, whereas receiving high-quality trauma training was related to lower secondary traumatic stress (Makadia et al.2017). Rayner et al. (2020) reported that caseload alone was not a predictor of secondary traumatic stress in Australian social workers and psychologists; however, it became a predictor when interacting with personal trauma history. A current study accomplished with Turkish mental health workers aligned with the Rayner et al.'s (2020) study on its weak positive correlation between clinical working hours and secondary traumatic stress and burnout (Yücel and Akoğlu 2023).

There are several professions in mental health workers such as psychiatry nurses, psychiatrists, clinical psychologists and social workers (Akdağ et al. 2023). Secondary trauma has been investigated in diverse samples including different professions however few of these can compare secondary traumatic stress among them due to low sample size. Pellegrini et al. (2022) and Manning-Jones et al. (2017) explained that psychologists reported less secondary traumatic stress compared to other professional groups because psychologists work with different groups simultaneously while working with trauma clients and therefore, report posttraumatic growth. Furthermore, Manning-Jones et al. (2017) suggested that this difference arises because psychologists pay more attention to self-care and use more functional methods to cope with stress. They reported a curvilinear relationship between posttraumatic growth and secondary trauma specifically observed in psychologists. As a result, psychologists experience secondary traumatic stress if their caseload is dominated with traumatized clients. The result emphasized that working with diverse groups let aside trauma clients may lead to posttraumatic growth (Manning- Jones et al. 2017).

Secondary Traumatic Stress Studies in Türkiye

Research focusing on secondary traumatic stress in Türkiye was conducted on specific professional groups as mentioned above. As a result, they compared different professions in terms of secondary traumatic stress. For instance, Gürdil-Birinci and Erden (2016) recruited psychologists, lawyers, social workers, and ambulance attendants in their sample. Their study yielded that psychologists were less susceptible to secondary traumatic stress and burnout, compared to other professional groups. Similarly, Zara and İçöz (2015) asserted that psychologists have a lower risk of traumatic stress than psychiatrists and other professional groups. On the other hand, Yazıcı and Özdemir (2022) identified personal trauma history as a significant risk factor for secondary traumatic stress in mental health workers in Türkiye. They also observed negative correlations between self-compassion and emotional intelligence with secondary traumatic stress (Yazıcı and Özdemir 2022).

Another current study focused on compiling studies examining secondary traumatic stress in experts involved in refugee assistance studies stands out (Ebren et al. 2022). The researchers state that experts working with asylum seekers, refugees, and migrants report various problems, including secondary traumatic stress, vicarious traumatic stress, intrusive thoughts, avoidance behaviors, sleep problems, nightmares, concentration problems, and increased negative thoughts. They predict that if these psychological symptoms are not detected and addressed, the number of experts working in these fields will decrease.

A divergent group of mental health professionals was screened in a recent research stıdy in terms of secondary traumatic stress, burnout, and compassion fatigue (Yücel and Akoğlu 2023). The study found positive correlations among secondary traumatic stress, burnout, and compassion fatigue in a dyadic fashion. These authors indicated that working hours had a weak and positive relation with secondary traumatic stress and burnout. Another study conducted with emergency physicians studied the role of empathy in secondary traumatic stress and post-traumatic growth (Akdağ and Ege 2024). The authors posited that there was a curvilinear relation between empathy and secondary traumatic stress. They highlighted that moderate level of empathy is crucial in predicting lower levels of secondary traumatic stress and in moderating post-traumatic growth and secondary traumatic stress dyad and burnout and secondary traumatic stress dyad. Akdağ and colleagues (2023) investigated the role of post-traumatic stress in secondary traumatic stress and burnout among child psychiatrists. The results showed that for child psychiatrists with high levels of post-traumatic growth, the relation between secondary traumatic stress and burnout was weaker than for their counterparts with low levels of post-traumatic growth (Akdağ et al. 2023).

Coping with Indirect Exposure to Traumatic Stress

Mental health workers experiencing empathy-based strain have resources to cope with their occupational-related stress. These resources can stem from individual and organizational factors (Rauvola et al. 2019). In terms of individual factors, mental health workers can gain awareness of their psychological resources and personal risk factors. They can equip themselves with different coping strategies, such as addressing personal trauma history (Hensel et al. 2015, Manning-Jones 2017, Diehm et al. 2019, Leung et al. 2022, Pellegrini et al. 2022, Yazıcı and Özdemir 2022). They can further reinforce protective factors such as self-care practices (Manning-Jones et al. 2017, Akdağ and Ege 2024).

In addition to the adverse effects of overwhelming events, individuals may undergo positive changes, specifically known as post-traumatic growth (PTG; Tedeschi and Calhoun 1996). PTG is a favorable transformation resulting from effectively coping with adversity. Conversely, deriving personal growth from adversity may be accompanied by post-traumatic depreciation (PTD; Cann et al. 2010). It's crucial to recognize that PTD and post-traumatic stress (PTS) are characterized differently. PTS involves symptoms such as intrusive re-experiencing of trauma, avoidance of trauma-related situations, and emotional numbness and/or hyperarousal. In contrast, PTD reflects the seemingly negative aspects of changes following traumatic experiences (Taku et al. 2020). Despite appearing paradoxical and counterintuitive, individuals can undergo both growth and depreciation within the same domain (Baker et al. 2008).

Another construct that requires detailed explanation is vicarious post-traumatic growth (VPTG), which occurs when professionals collaborating with trauma survivors undergo personal and professional development by witnessing the resilience and capacity of their clients to overcome adversity. This suggets a vicarious phenomenon that is not only positive but also highly impactful (Tsirimokou et al. 2023). Such kind of experiences can enable changes in self-perception, interpersonal relationships and meaning of life of the mental health workers (Tedeschi and Calhoun 1995).

Conclusion

Professions providing care and assistance to people surviving from trauma are in need of support (Akdağ and Ege 2024). The nature of trauma can be influential on the ones who are indirectly exposed to traumatic content and the graphical details of the trauma (Bride 2007, Figley 1995). Since mental health workers experience empathy-based strain while providing services to people affected by trauma (Rauvola et al. 2019), protection against the effects of secondary traumatic stress caused by exposure to traumatic stress and graphic trauma details can prevent negative personal and work-related outcomes. This includes occupational burnout, vicarious trauma, compassion fatigue, and secondary traumatic stress (Pearlman and Saakvitne 1995, Hargrave et al. 2006, Diehm et al. 2019, Yilmaz 2021, Yazıcı and Özdemir 2022, Akdağ and Ege 2024).

Self-care strategies should be encouraged during training and candidate of mental health workers should be informed about the possible psychological consequences of providing care to engage in activities to care for themselves. Clinical training should integrate discussions about secondary traumatic stress, post traumatic growth, and depreciation. Mental health workers should be promoted and monitored during their training in terms of their engagement with self-care activities. Weekly gatherings, round-table discussions and peer supervision could be integrated in the curricula of professional trainings. Professionals with low levels of protective factors and high levels of risk factors for secondary trauma can be screened and further motivated to

take action to develop self-care strategies to promote resilience to traumatic effects that may affect them in the course of their work. Since high quality of trauma training and supervision relationship are associated with low secondary traumatic stress (Makadia et al. 2017, Quinn et al. 2019, Akdağ et al. 2023) mental health care workers should get high quality training and offered with annual training activities to adapt to current practices in trauma informed care.

References

Akdağ B, Çeleb SB, İpekten F, Usluoğlu S, Nasıroğlu S (2023) The moderating role of posttraumatic growth in secondary traumatic stress–burnout relationship: a sample of child psychiatrists from Turkey. Middle East Current Psychiatry, 30:93.

Akdağ B, Duygu E (2024) The Curvilinear empathy–secondary traumatic stress relationship: the more empathy, the better? (empathy, STS, and burnout in emergency physicians). J Loss Trauma, 29:76-94.

APA (2013) Diagnostic and Statistical Manual of Mental Disorders, 5th ed (DSM-5). Washington DC, American Psychiatric Association.

Baker J, Kelly C, Calhoun L, Cann A, Tedeschi R (2008) An examination of posttraumatic growth and posttraumatic depreciation: two exploratory studies. J Loss Trauma, 13:450-465.

Branson DC (2019) Vicarious trauma, themes in research, and terminology: a review of literature. Traumatology, 25:2–10.

Brewin CR (2005) Systematic review of screening instruments for adults at risk of PTSD. J Trauma Stress, 18:53-62.

Bride BE (2007) Prevalence of secondary traumatic stress among social workers. Social Work, 52: 63-70.

Cann A, Calhoun LG, Tedeschi RG, Solomon Z (2010) Posttraumatic growth and depreciation as independent experiences and predictors of well-being. J Loss Trauma, 15:151-166.

Danieli Y (1996) Who takes care of the caretakers? the emotional consequences of working with children traumatized by war and communal violence. In Minefields in Their Hearts: The Mental Health of Children in War and Communal Violence (Eds RJ Apfel, Simon B):189-205. Yale, University Press.

Diehm RM, Mankowitz NN, King RM (2019) Secondary traumatic stress in Australian psychologists: individual risk and protective factors. Traumatology, 25:196-202.

Ebren G, Demircioğlu M, Çırakoğlu OC (2022) A neglected aspect of refugee relief works: secondary and vicarious traumatic stress. J Trauma Stress, 35:891–900.

Figley CR (1995) Compassion fatigue: toward a new understanding of the costs of caring. In Secondary Traumatic Stress: Self-care Issues for Clinicians, Researchers, and Educators (Ed. BH Stamm):3-28. New York, The Sidran Press.

Gürdil Birinci G, Erden G (2016) Yardım çalışanlarında üstlenilmiş travma, ikincil travmatik stres ve tükenmişliğin değerlendirilmesi. Türk Psikoloji Dergisi, 31:10-26.

Hargrave PA, Scott KM, McDowall J (2006) To resolve or not to resolve: past trauma and secondary traumatic stress in volunteer crisis workers. Journal of Trauma Practice, 5:37-55.

Hensel JM, Ruiz C, Finney C, Dewa CS (2015) Meta-analysis of risk factors for secondary traumatic stress in therapeutic work with trauma victims. J Trauma Stress, 28:83-91.

Kahil A, Palabıyıkoğlu R (2018a) Secondary traumatic stress in Turkish aid workers: adaptation of a measure and investigation of secondary traumatic stress. Klinik Psikoloji Dergisi, 2:107-116.

Kahil A, Palabıyıkoğlu R (2018b) İkincil travmatik stres. Psikiyatride Güncel Yaklaşımlar, 10:59-70.

Kounenou K, Kalamatianos A, Nikoltsiou P, Kourmousi N (2023) The Interplay among empathy, vicarious trauma, and burnout in Greek mental health practitioners. International Journal of Environmental Research and Public Health, 20:3503.

Leiter MP, Maslach C (1998) The impact of interpersonal environment on burnout and organizational commitment. J Organ Behav, 9:297-308.

Leung T, Schmidt F, Mushquash C (2022) A personal history of trauma and experience of secondary traumatic stress, vicarious trauma, and burnout in mental health workers: a systematic literature review. Psychol Trauma, 15:213-221.

Ligiéro DP, Gelso CJ (2002) Countertransference, attachment, and the working alliance: the therapist's contribution. Psychotherapy (Chic), 39:3-11.

Măirean C (2016) The relationship between secondary traumatic stress and personal posttraumatic growth: Personality factors as moderators. J Adult Dev, 23:120-128.

Makadia R, Sabin-Farrell R, Turpin G (2017) Indirect exposure to client trauma and the impact on trainee clinical psychologists: secondary traumatic stress or vicarious traumatization? Clin Psychol Psychother, 24:1059-1068.

Manning-Jones S, de Terte I, Stephens C (2017) The relationship between vicarious posttraumatic growth and secondary traumatic stress among health professionals. J Loss Trauma, 22:256-270.

Maslach C, Jackson S (1981) The measurement of experienced burnout. J Organ Behav, 2:99-113.

Newell JM, MacNeil GA (2010) Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. Best Practices in Mental Health, 6:57-68.

Pearlman LA, Saakvitne KW (1995) Trauma and the Therapist: Countertransference and Vicarious Traumatization in Psychotherapy with Incest Survivors. New York, NY, WW Norton.

Pellegrini S, Moore P, Murphy M (2022) Secondary trauma and related concepts in psychologists: a systematic review. J Aggress Maltreat Trauma, 31:370-391.

Quinn A, Ji P, Nackerud L (2019) Predictors of secondary traumatic stress among social workers: supervision, income, and caseload size. J Soc Work, 19:504-528.

Rauvola RS, Dulce MV, Kristi NL (2019) Compassion fatigue, secondary traumatic stress, and vicarious traumatization: a qualitative review and research agenda. Occup Health Sci, 3: 297-336.

Rayner S, Davis C, Moore M, Cadet T (2020) Secondary traumatic stress and related factors in Australian social workers and psychologists. Health Soc Work, 45:122-130.

Rothschild B, Rand M (2006) Help for the Gelper: Self-care Strategies for Managing Burnout and Stress. New York, WW Norton.

Rzeszutek M, Partyka M, Gołąb A (2015) Temperament traits, social support, and secondary traumatic stress disorder symptoms in a sample of trauma therapists. Prof Psychol Res Pr, 46:213-220.

Salston MD, Figley RC (2003) Secondary traumatic stress effects of working with survivors of criminal victimization. J Trauma Stress, 16:167-174.

Silveria Júnior EDM, Polanczyk GV, Eizirik M, Hauck S, Eizirik CL, Ceitlin LHF (2012) Trauma and countertransference: development and validity of the assessment of countertransference scale. Braz J Psychiatry, 34:201-206.

Sprang G, Craig C, Clark J (2011) Secondary traumatic stress and burnout in child welfare workers. Child Welfare, 90:149-168.

Taku K, Cann A, Tedeschi RG, Calhoun LG (2020) Core beliefs shaken by an earthquake correlate with posttraumatic growth. Psychol Trauma, 12:702-710.

Tedeschi RG, Calhoun LG (1995) Trauma and Transformation: Growing in The Aftermath of Suffering. Thousand Oaks, CA, Sage.

Tedeschi RG, Calhoun LG (1996) The posttraumatic growth inventory: measuring the positive legacy of trauma. J Trauma Stress, 9:455-471.

Tsirimokou A, Juliane AK, Sonia KD (2023) Vicarious post-traumatic growth in professionals exposed to traumatogenic material: a systematic literature review. Trauma Violence Abuse, 24:1848-1866.

Weathers FW, Blake DD, Schnurr PP, Kaloupek DG, Marx BP, Keane TM. (2013) The life events checklist for DSM-5 (LEC-5). www.ptsd.va.gov (Accessed 13.12.2022).

Yazıcı H, Özdemir M (2022) Predictors of secondary traumatic stress in mental health professionals: trauma history, self-compassion, emotional intelligence. J Ration Emot Cogn Behav Ther, 41:162-175.

Yilmaz T (2021) Victimology from clinical psychology perspective: psychological assessment of victims and professionals working with victims. Curr Psychol, 40:1592-1600.

Yücel B, Akoğlu B (2023) Secondary traumatization in mental health workers. Psikiyatride Güncel Yaklaşımlar, 15:383-393.

Zara A, İçöz FJ (2015) Türkiye'de ruh sağlığı alanında travma mağdurlarıyla çalışanlarda ikincil travmatik stres. Klinik Psikiyatri Dergisi, 18:15-23.

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