Specific Aspects of Burnout Among Oncology Care Providers

Peter Kovacs^{1,2}, Tamas Szekeres¹, Dora Horvath¹, Tamas Matrai¹, Magdolna Dank¹

- ¹ National Institute of Oncology, Rehabilitation Department, Budapest
- ² Pázmány Péter Catholic University, Faculty of Humanities and Social Sciences, Institute of Psychology, Department of Personality Psychology, Budapest

Introduction: Burnout is a complex, process-oriented phenomenon with long-term negative consequences, which tends to recur regularly in helping professions. The identification of psychological risk factors leading to burnout, as well as the protective factors that may mitigate its development, is essential for effective prevention and targeted workforce support. This task is particularly pressing in emotionally demanding fields such as oncology, where professional work not only entails heightened emotional vulnerability but also presents specific intervention-related challenges. **Objective:** The aim of this study is to explore the characteristics and specific risk factors of burnout among professionals working in oncology care, and to identify protective factors that may contribute to the prevention and alleviation of burnout. Method: Based on a review of relevant literature, the study examines the individual- and organizational-level challenges that are observable in everyday oncological practice, in relation to potential interventions and preventive strategies. Results: Professionals involved in oncology care are exposed to increased and domain-specific emotional burdens that adversely affect their mental health, reduce performance, and negatively impact the quality of patient care. The analysis highlights the critical role of individual resilience, the monitoring of well-being, and the importance of institutional-level intervention strategies. Discussion: Preventing burnout requires integrated, multi-level interventions that take into account both individual resources and the institutional culture. Strengthening protective factors is essential for sustaining long-term psychological wellbeing. Effective prevention necessitates regular monitoring of burnout and well-being, the development of individual coping capacities, and the cultivation of a supportive organizational climate. Conclusion: Burnout among oncology professionals constitutes not only an individual but also a systemic challenge. Supporting colleagues experiencing exhaustion must be considered a fundamental workplace condition. The foundation of prevention lies in the implementation of a robust psychological support system, institutional accountability, and the targeted promotion of staff well-being.

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THE PHENOMENON OF BURNOUT

In 1974, Freudenberger defined burnout as a state of physical, emotional, and mental exhaustion resulting from chronic, work-related emotional strain and stressors that exceed an individual's psychological coping capacity. This condition may be accompanied by feelings of hopelessness, perceived incompetence, and a loss of goals and ideals (Freudenberger, 1974; Bordás, 2010; Copur, 2019).

Individuals experiencing burnout often exhibit a negative attitude towards themselves, their work, and others, which may manifest as cynicism, boredom, and persistent fatigue (Győrffy & Girasek, 2015). Expanding upon the initial definitions that focused primarily on the individual and personality-related factors, Maslach and colleagues emphasized the cyclical and process-oriented nature of the phenomenon, as well as its social contextuality (Maslach, 1998). In the 1980s, they developed a widely used assessment tool, the Maslach Burnout Inventory (MBI), which conceptualizes burnout as a multidimensional syndrome. According to their findings, the symptoms of burnout typically fall into three dimensions, which are often accompanied by somatic complaints: emotional exhaustion (e.g., fatigue, insomnia, diffuse somatic symptoms), depersonalization (e.g., detachment, negativism, cynicism, avoidance, social withdrawal), and reduced personal accomplishment (e.g., feelings of failure, overload, inadequacy, helplessness). Occupational stress may thus lead to emotional exhaustion and depersonalization, which, combined with diminished self-efficacy, results in burnout. The condition tends to progress in a cyclically deepening pattern and may become chronic, further contributing to emotional and physical symptoms. As the process unfolds, individuals gradually lose vitality, energy, and motivation—even for activities that previously brought joy. Sleep disturbances may progress to insomnia, often accompanied by an inability to rest or recover, leading to decreased concentration and declining work performance. Physical symptoms such as migraine, dyspnea, chest pressure, and gastrointestinal issues may also occur (Copur, 2019), along with psychological consequences such as social withdrawal, pessimism, depressed mood, cynicism, chronic fatigue, decreased sense of efficacy, demoralization, diminished productivity, physical and emotional exhaustion, dysfunctional cognitive functioning, and insomnia (Hlubocky et al., 2016). Burnout—considered by some as a modern epidemic is defined as a stress-related condition emerging

primarily from occupational strain, and is associated with both physical and psychological symptoms, as well as impaired self-esteem, reduced performance, quality, and efficiency (West et al., 2016). The phenomenon typically follows a staged progression: beginning with enthusiasm and idealism at the start of one's career (idealization), followed by realism and commitment to the profession, then a decline in interest, enthusiasm, and motivation (disillusionment), leading to a questioning of professional purpose and withdrawal from other activities (frustration), and ultimately resulting in routinization, emotional depletion, a sense of loss of control, and potentially hostility toward the workplace or colleagues (apathy) - a state indicative of severe burnout (Edelwich et al., 1980; Ónody, 2001).

INDIVIDUAL AND ORGANIZATIONAL ASPECTS OF BURNOUT IN SECTORAL CONTEXTS

The World Health Organization (WHO) has classified burnout as a distinct syndrome in the International Classification of Diseases, 11th Revision (ICD-11), under code QD85. It is explicitly defined as a condition related to occupational stress, characterized by symptoms that arise specifically in the workplace or during the course of professional activities (Hlubocky et al., 2017). According to this classification, burnout pertains exclusively to phenomena occurring within the occupational context and should not be applied to experiences in other life domains.

The ICD-11 provides three core criteria for identifying burnout: 1, feelings of exhaustion and reduced energy; 2, increased mental distance from one's job, or negative or cynical attitudes toward work; 3, reduced professional efficacy. From a differential diagnostic perspective, burnout must be distinguished from mood disorders, stress-related disorders, anxiety disorders, and adjustment disorders. Although burnout develops as a consequence of prolonged stress, it is typically less consciously perceived by the individual compared to the subjective distress commonly associated with stress itself. While anxiety is often accompanied by pronounced energy depletion, burnout is more closely associated with diminished motivation, emotional blunting, helplessness, and hopelessness. Importantly, burnout is not categorized as a mental disorder within the ICD-11. Rather, it is recognized as an occupational phenomenon that may warrant medical attention, given its potential impact on health and functioning.

Burnout is a state characterized by emotional, psychological, and physical exhaustion, accompanied by reduced professional performance and depersonalization. It is typically triggered by occupational stress and/or prolonged emotional strain in the workplace, which the individual is unable to cope with using habitual problem-solving strategies or established coping mechanisms. Importantly, burnout is not solely an individual-level issue; it also has systemic implications. Chronic emotional exhaustion not only endangers the health and well-being of workers but also negatively impacts the quality, safety, and sustainability of care. In the healthcare sector, burnout has become one of the leading causes of workforce attrition.

Specific characteristics of the Hungarian healthcare system—such as chronic underfunding, an aging and overburdened workforce, and a rigidly hierarchical organizational culture—constitute significant risk factors for the development of burnout. Limited professional autonomy, lack of recognition and feedback, the underdevelopment of a transparent organizational feedback culture, and excessive administrative burdens all hinder healthcare professionals' ability to cope effectively with the emotional demands of their work. The absence or inadequacy of institutional practices providing professional supervision and psychological support further increases the risk of deteriorating mental health among staff. These structural factors not only impair individual coping capacity but may also have long-term consequences for professional retention and, by extension, for the quality and sustainability of patient care. As such, they pose a critical threat to the maintenance of high-quality healthcare delivery.

PREVALENCE OF BURNOUT AMONG HEALTHCARE PROFESSIONALS

Due to the complexity and difficulty of accurate and consistent differentiation—including diagnosis, definition, and assessment—the reported prevalence of burnout among healthcare professionals varies widely across studies examining different groups (Allegra et al., 2003; Demerouti et al., 2021; Murali & Banerjee, 2018; Shanafelt & Dyrbye, 2012).

In 2020, Medscape conducted a survey involving 15,000 physicians from various specialties across the United States to assess burnout prevalence (Medscape, 2020). According to the findings, 42% of physicians self-identified as experiencing burnout. Notably, the study differentiated respondents by age group: 39%

of baby boomers (aged 55–73), 48% of Generation X (aged 40–54), and 38% of millennials (aged 25–39) reported symptoms of burnout. Gender differences were also observed, with 48% of female physicians and 37% of male physicians reporting burnout. When analyzed across 29 medical specialties, urologists had the highest reported rate (54%), followed by radiologists (46%), while 42% of oncologists indicated significant symptoms of burnout.

Among the primary contributors to burnout, workload—including both clinical and non-clinical duties—excessive administrative tasks, and reduced sense of autonomy have been identified as particularly significant (Copur, 2019; Gribben & Semple, 2021). Factors such as the frequency of delivering bad news or managing acute illnesses further increase vulnerability, particularly among physicians and nurses. Other occupational risk factors include on-call duties, work in inpatient care settings, employment at multiple institutions, and childless marital status (Győrffy & Girasek, 2015). Demographic and personal risk factors for burnout include early-career status, younger age, female gender, single relationship status, and limited access to support services (Queirós et al., 2013; Sipos et al., 2019). Conversely, protective factors identified include academic engagement (teaching and research) among surgeons, higher emotional intelligence, certain personality types, and the presence of mentoring or supervision (Galaiya et al., 2020). Job satisfaction—such as feeling recognized for the quality and quantity of one's work—has also been identified as a key protective factor, even under high occupational demands (Shanafelt et al., 2014). Emotional exhaustion is closely linked to the absence of perceived autonomy and independent decision-making, which is regarded as one of the strongest predictors of burnout (Lee et al., 2013). The previously cited 2020 Medscape survey found that the most frequently cited cause of burnout among physicians was excessive and redundant administrative work (55%). Other frequently reported contributors included long working hours, lack of collegial or managerial recognition, and the increasing technicization of clinical tasks (e.g., computer-based documentation) (Medscape, 2020). The survey also examined how physicians cope with burnout. The most common coping strategies were physical exercise (more prevalent among men) and spending time with family or friends (more common among women). Other coping behaviors included social withdrawal, consumption of fast food, overeating, alcohol use, sleep, and musicrelated activities. These behaviors represent a mix of adaptive and maladaptive coping strategies. Agegroup comparisons revealed generational differences in coping patterns: baby boomers (55-73 years) were more prone to isolation, millennials (25–39 years) tended to cope by sleeping, while Generation X (40-54 years) favored physical activity. Alarmingly, the survey also revealed that physicians experience suicidal ideation at approximately twice the rate of the general population. Around 20% of respondents—23% of men and 22% of women—reported having had suicidal thoughts. Notably, 42% of them had never disclosed these thoughts to anyone, and only one-third had discussed them with a therapist, colleague, friend, or family member. Baby boomers were more likely to seek professional help, whereas younger generations more often confided in family or friends; however, nearly half of all respondents reported not sharing their emotional struggles with anyone. Burnout has become so normalized within the medical profession that 61-64% of respondents indicated they had no plans to seek help, perceiving their distress as part of the job. Many (48-56%) did not consider their symptoms severe enough, while others (32–53%) felt too busy to address the issue. Among those considering change, reducing working hours was the most frequently cited solution (Medscape, 2020).

Kovács et al. (2010) conducted a comparative study examining burnout among Hungarian nurses and physicians. They found that nurses reported significantly higher levels of emotional dissonance and fewer opportunities for emotion regulation (e.g., emotional control) compared to physicians. However, no significant differences were observed between the two groups in terms of overall burnout severity (Kovács et al., 2010).

In their 2015 study involving Hungarian healthcare professionals, Ádám and colleagues found the prevalence of depression and at least moderate burnout to be 35.1% and between 34% to 74%, respectively. The presence of a partner or children, longer duration of employment, and work in outpatient care emerged as protective factors against burnout. Conversely, the absence of a partner and male gender were identified as risk factors for depression and depersonalization in their analysis (Ádám et al., 2015).

In their 2019 study, Czeglédi and Tandori-Kovács examined the prevalence of burnout and prevention possibilities among Hungarian nurses. Their conclusions highlighted that the shortage of nurses is influenced by the low level of social recognition and the resulting, or associated, low standard of living,

as well as the significant physical and emotional burdens faced by healthcare professionals. These factors threaten them with burnout, characterized by complete physical and mental exhaustion. Protective factors against the intensification of burnout include professionals' self-awareness, continuous and adequate monitoring of their physical and mental condition, and seeking help (Czeglédi & Tandori-Kovács, 2019).

Balog et al. (2021) examined healthcare workers in Győr-Moson-Sopron County and found that among the surveyed physicians (N=481), 89.6% were affected by at least one of the three dimensions of burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment), while 24.7% experienced symptoms across all three dimensions. Their results indicated a higher prevalence compared to international data (Balog et al., 2021).

Cseh et al. (2022) conducted a study involving physicians and healthcare professionals (N=1,048) at two hospitals in Zala County. They found that emotional exhaustion was the most prevalent dimension of burnout among respondents: 46.2% exhibited a moderate level, while 16.4% showed a high degree of burnout. The intensity of burnout was notably higher among males and physicians (Cseh et al., 2022).

BURNOUT IN ONCOLOGY CARE

The mortality rate of oncological diseases has remained stable for years despite a continuously increasing incidence. The rise in case numbers is primarily due to earlier detection, which in turn allows for interventions to begin at an earlier stage, potentially increasing their effectiveness. The course of oncological diseases has become chronic in nature, and the expanding toolkit of active treatments results in prolonged care processes (Shanafelt et al., 2014). Besides patients and their families, healthcare professionals involved in treatment, care, and support also play a crucial role in these processes. The demand placed on oncology care providers increases alongside the rising number of cases. Oncology professionals face heightened emotional strain because, due to the nature of cancer, they encounter death, dying, incurability, and grief significantly more frequently during their work compared to those in other healthcare fields. Prolonged exposure to this intense emotional burden raises the likelihood of burnout: caring for patients with terminal illnesses presents serious emotional challenges for healthcare providers,

Table 1. Types of Psychosocial Burdens: A Didactic Comparison between Oncology and General Clinical Care

Factors Contributing to Psychosocial Strain	Oncology Care	Other Clinical Fields
Frequency of death- and loss-related situations	High/frequent (e.g., accompanying dying, grief, disease progression, accepting incurability)	Typically lower frequency, episodic occurrence
Duration of patient journey and caregiver–patient relationship	Long-term (months or years), often marked by emotionally taxing changes	Often shorter, more structured, faster course of care
Occurrence of emotional dissonance	Frequent (required professionalism in emotional regulation vs. exposure to emotionally intense experiences)	Present, but generally less constant or intense
Empathic exposure and "container function"	- Ongoing, emotionally involving relationships - Constant unstructured availability - Continuous exposure and demand	Episodic, focused relationships with lower intensity or more structured emotional processing
Delivering bad news, prognostic uncertainty, disease progression	Daily, profession-specific challenge	Less typical or appears less frequently
Professional complexity, demand for continuous development	demand for continuous - Rapidly evolving field - Technological incogenetic challenges	
Burden of multidisciplinary cooperation	- Expected - Requires complex daily cooperation	Typically more relaxed, less structured collaboration
Perception of control and self-efficacy	Fluctuating; frequent sense of helplessness, failure	Faster feedback, more dominant experience of success

Notes: Each healthcare profession entails unique psychological and structural burdens, which affect professionals in different forms but with comparable significance. The purpose of the above table is not to compare the "difficulty" of different fields, but to map the specific contexts of oncology, which require distinct preventive and intervention responses. Individual resilience, quality of the work environment, and the extent of social support are key factors in burnout prevention across all specialties.

which may impact their performance in both quantitative and qualitative terms. Decreased performance, along with perceived or actual experiences of failure, may co-occur during work and further influence the stress experienced by these professionals.

The diagnosis, treatment, and care of cancer patients involve prolonged and intense emotional strain, as patient management often requires extended, complex interventions and multidisciplinary collaboration. The chronic and progressive nature of the patient pathways, coupled with the repeated proximity to incurability, dying, and death, represents sustained psychological exposure for healthcare providers.

The following overview (Table 1) presents the structural differences in psychosocial burdens between oncology care and other clinical fields. The purpose of this summary is not to quantitatively assess the extent of the burden, but rather to consciously highlight the differing characteristics for didactic purposes. Such differentiation may facilitate the development of profession-specific preventive strategies.

Communication about death and grief, uncertainty related to prognosis, the emotional connection based

on empathy with patients and their families, as well as the need for self-protection through emotion regulation, together may lead to emotional dissonance. This experience of dissonance often constitutes a central psychodynamic antecedent of burnout, which can escalate if adaptive psychological defense mechanisms are not developed at the individual level, or if the healthcare system does not provide structured processing of stressful experiences (e.g., through supervision or supportive group interventions).

Increasing evidence suggests that oncology healthcare professionals experience higher levels of emotional exhaustion and depersonalization compared to other medical specialties. This is particularly evident among younger, less experienced practitioners who often lack adequate coping repertoires and organizational protective factors such as mentoring, peer support, and regular supervision. Disappointment related to treatment efficacy, feelings of failure due to disease progression, and the mental and emotional internalization of seemingly hopeless situations can further erode the helper's self-concept, which serves as an additional indicator of burnout.

A 2017 review study synthesizing burnout data from nearly five thousand oncologists found that 32% of these professionals exhibited high levels of burnout. The study also reported above-average morbidity of psychiatric disorders, sleep disturbances, pathological alcohol consumption, and increased use of sedatives among younger practitioners. Additionally, many participants reported stress-related somatic complaints such as gastrointestinal problems, digestive disorders, ulcers, arrhythmias, and headaches (Medsisauskaite & Kamau, 2017). The authors attributed the elevated stress and resultant burnout syndrome to mortalityrelated factors inherent in oncology care, increasing patient caseloads, and the emotionally demanding nature of the work. They emphasized the urgent need for the development, implementation, and regular application of appropriate interventions, as high burnout levels are associated with increased attrition rates and diminished professional performance.

An exploratory analysis conducted by the American Medical Association on a sample of 7,000 physicians found that although burnout is prevalent among oncologists, its average rate is not higher than that observed in other medical specialties (Cseh et al., 2022). Specifically, the burnout rate among oncologists was 37.9%, which was significantly lower compared to internists, whose burnout rate was 48.8%. Further nuance was provided by findings indicating that oncologists are more likely to choose the same specialty again if given the opportunity to select their career path anew (Shanafelt & Dyrbye, 2012). The dynamic advancement of the oncology field may mitigate some of the occupational disadvantages and challenges associated with burnout. Recent years have seen substantial expansion in therapeutic options for cancer patients, alongside ongoing research and development, creating a motivating professional environment. This progress not only fosters professional growth but also offers hope through novel and more effective treatments for previously incurable diseases.

Rath et al. (2015) investigated burnout among gynecologic oncologists. In their study, 30% of the physicians scored high on the emotional exhaustion scale, 10% on the depersonalization scale, and 11% reported low personal accomplishment. Overall, 32% of the participants met the clinical threshold indicative of burnout. Additionally, 33% of respondents exhibited symptoms of depression, 13% reported suicidal ideation, 15% engaged in problematic alcohol consumption, and 34% experienced a decline in quality of life (Rath et al., 2015).

Eelen et al. (2014) conducted a survey in Belgium, finding that 51.2% of oncologists experienced emotional exhaustion, 31.8% reported depersonalization, and 6.8% indicated low personal accomplishment. Their results demonstrated a significantly elevated level of burnout factors among oncology professionals, particularly oncologists (Eelen et al., 2014).

Kovács et al. (2012) compared groups of healthcare professionals working in Hungarian oncology care (N=48), psychiatric-psychotherapeutic care (N=62), and other healthcare sectors (N=89). Regarding burnout, the authors found no significant differences between the groups. The prevalence of burnout was similarly high across all three groups: 37.8% of those working with oncology patients and 32.9% of those in non-oncological care reported high levels of emotional exhaustion. Thus, the study identified comparable burnout levels among the examined subsamples. These figures align with international data, indicating that at least one-third of professionals in oncology care are affected. The researchers concluded that although healthcare workers experience different types of stress depending on their specialty, there are no significant long-term differences in burnout persistence. An intriguing and noteworthy finding was that oncology professionals tend to suppress negative emotions, experiencing them internally without outward expression. These emotions are often immediately inhibited or repressed, necessitating the display of alternate emotions or emotional detachment in their behavior. This emotional dissonance constitutes a significant psychological burden, making it disproportionately prevalent in oncology care compared to other specialties.

Sipos et al. (2019) investigated burnout levels among healthcare professionals working in a radiology department in Hungary. In the sample studied (N=404), the dimensions of depersonalization and emotional exhaustion indicated mildly elevated levels of burnout. Their results further showed that professionals aged 31–35 years and those with 16–20 years of work experience were the most vulnerable groups across all three burnout dimensions. Additionally, individuals holding an MSc degree exhibited significantly lower levels of emotional exhaustion compared to their peers (Sipos et al., 2019).

Sipos et al. (2023) examined burnout factors among oncology healthcare workers in Hungary during the COVID-19 pandemic, with a sample size of 205 participants. Their study found that 44.9% of respondents scored high on the emotional exhaustion

subscale of the Maslach Burnout Inventory, 46.3% on the reduced personal accomplishment subscale, and 26.3% on the depersonalization subscale. The results indicated that males, oncologists, those working more than 50 hours per week, and individuals performing on-call duties were significantly more vulnerable to burnout. Furthermore, a strong correlation was observed between high emotional exhaustion scores and the number of weekly working hours (Sipos et al., 2023).

CONTEXT OF BURNOUT: THE MATRIX OF INDIVIDUAL, SOCIAL, ORGANIZATIONAL, AND SOCIETAL DETERMINANTS

Burnout poses an increased risk among healthcare professionals working with severely ill patients (Hegedűs et al., 2004). At the individual level, this is typically manifested by a decline in empathic capacity and skills, resulting in depersonalized (dehumanized) and sometimes cynical interpersonal interactions. These relational changes often lead to difficult or impaired communication and a reduced sense of control over one's work (Kulcsár, 2002). The perception of decreased effectiveness further contributes to diminished performance, creating a self-sustaining and self-destructive cycle that exacerbates burnout symptoms and consequences, ultimately deteriorating the individual's physical and mental health. Among professionals working in oncology, emotional dissonance is particularly prevalent (Kovács et al., 2010). Emotional dissonance is characterized by a discrepancy between the subjectively experienced emotion and the emotion expressed, or by the expression of emotions that are not appropriate to the situation.

Zapf et al. (2002) in their comprehensive review on theories related to emotional expression identified perceived control and social support as moderating factors in the relationship between stress caused by emotional dissonance, burnout, and job satisfaction (Zapf, 2002). They also emphasized that emotional regulation and expression dissonances experienced by individuals during work, combined with organizational difficulties, significantly increase the likelihood of burnout. Burnout in helping professions can be interpreted as a consequence of emotionally demanding interpersonal relationships between the helper and the helped, or between the provider and seeker of support. This represents an asymmetric relationship in which one party, emotionally vulnerable, inevitably draws upon not only the

attentional and professional resources but also the emotional containing or "container" capacities of the other person (Hegedűs et al., 2004). Pines et al., when reviewing individual factors, highlighted that those most at risk are individuals who seek existential affirmation from their work and perceive their job not merely as a profession but as a kind of mission (Pines, 2017). Increased individual vulnerability may occur when a person starts work with idealized expectations, exhibits excessive (exclusive) commitment to their job, and demonstrates disproportionate emotional and psychological involvement. A related phenomenon is the 'helper syndrome,' first described by Schmidbauer in 1977, wherein the helper satisfies their own internal needs through helping; work and altruism thus become therapeutic tools. In this sense, helping serves as a distraction: the individual helps and sacrifices themselves in order to avoid confronting their own internal emotional blockages or early (childhood) traumas (Schmidbauer, 1977). Workaholism is considered a risk factor for burnout and has been linked to compulsive personality traits (Atroszko et al., 2020).

The process of burnout is often accompanied by a gradual erosion of professional identity, which becomes particularly critical in relation to selfesteem and professional self-concept that are built upon a strong sense of vocation. Oncology care professionals frequently face ethical dilemmas such as issues surrounding overtreatment, the challenge of delivering bad news, or communicating the realities of therapeutic goals and possibilities. These decision-making situations can easily lead to internal conflict and psychological distress. In such moments, practitioners may experience an irresolvable tension between their professional principles—rooted in their value system—and the practical limitations of what can be achieved. This ongoing moral and psychological burden can, over time, result in identity crises, apathy, and ultimately lead to professional attrition.

Burnout among helping professionals thus represents not only an individual narrative of suffering but also a systemic phenomenon with serious implications for the quality of patient care and the moral well-being of healthcare providers.

In terms of social factors, recognition of performance and achievement serves as a key element reinforcing the meaningfulness and usefulness of work. Supportive collegial relationships in the workplace represent a relevant form of perceived social support. At the organizational level, the presence of

Level	Protective Factor	Description / Significance	Development / Application Opportunities
Individual	Emotional self-awareness, self-reflection	Recognizing, interpreting, and managing one's own emotional reactions	Self-awareness training, supervision, psychological counseling
	Diverse coping repertoire	Use of flexible coping strategies and stress management techniques	Relaxation, mindfulness, psychoeducation
	Work-life balance	Balancing professional and personal roles	Time management support, recreational programs
Social	Collegial support	Safe, trust-based working relationships	Group discussions, community building, team development
	Mentorship / support for newcomers	Role of experienced colleagues in strengthening protection	Institutional mentoring programs, structured onboarding
Organizational	Organizational culture supporting supervision	Structured organizational opportunities for processing emotional strain	Regular supervision integrated into the work schedule
	Recognition and feedback routines	Recognition of professional values and individual/group performance	Positive feedback culture, institutional reward systems
	Flexible work organization, support for individual preferences	Possibility of workload reduction/ restructuring/optimization tailored to individual conditions	Remote work options, flexible work hours, sabbatical
	Well-being monitoring	Regular, objective monitoring of employees' mental state	Well-being questionnaires (e.g., WHO-5), burnout scales (e.g., MBI), institutional surveys, annual status assessments

Table 2. Protective Factors in Burnout Prevention – Levels, Effects, Opportunities

a workplace mentor or a credible, knowledgeable individual can protect professionals from feelings of isolation and abandonment. Similarly, opportunities for professional development, further training, and engagement in activities related to the profession but not part of daily clinical duties (e.g., teaching, research)—can have preventive effects against burnout. Maintaining individual motivation, developing stress management skills, and applying other adaptive coping strategies become essential for retaining personnel within the profession. Organizational support for individual emotional labor may include providing structured and framed opportunities to process emotionally taxing experiences (e.g., Balint groups). Healthcare professionals typically operate within a hierarchical organizational system, which can simultaneously offer professional security and retention benefits. However, due to its nature, this structure often leaves little room for expressing and articulating emotionally distressing experiences. Workplace policies and frameworks often define the rules of emotional labor, which may inadvertently increase emotional dissonance experienced by individuals. Additionally, vicarious and secondary traumatization refer to further challenges arising from the work environment and the nature of the workplace

(such as oncology settings). Professionals endure trauma indirectly due to continuous contact with patients who have experienced or are experiencing trauma. This results in ongoing exposure and persistent emotional burden stemming from others' traumatic histories (Herman, 2011; Szemerey, 2016).

The expectations generated by the workplace, the use of rewarding and sanctioning mechanisms, the communication between organizational levels and colleagues, as well as the development of the workplace social network impose certain boundaries on the individual, yet they can also provide retaining opportunities. The functioning of the organization is crucial in many respects concerning the individual's risk of burnout [see, for example, ref. 4]. The workplace organization plays an important role not only in optimizing workload but also in facilitating the unfolding of individual motivations.

THE ROLE OF PROTECTIVE FACTORS IN PREVENTING BURNOUT

Burnout is not merely an inevitable consequence of risk factors but also arises from the presence or absence of actively functioning individual and organizational protective factors operating in parallel. In the context

of oncology care professionals, the availability of individual and organizational resources capable of mitigating the negative emotional impact associated with the vocation is of particular importance.

Regular assessment of individual well-being not only facilitates the early identification of risk factors but also provides insight into employees' resilience, motivational status, and available psychological resources. Well-being itself can thus be regarded as a protective factor and represents a measurable, developable variable at the institutional level. It can, for example, be integrated into workplace mental health and burnout prevention programs aimed at staff care. Table 2 provides an overview of the key protective factors, including their levels, descriptions, and potential avenues for development.

BURNOUT PREVENTION AND INTERVENTION OPPORTUNITIES

Burnout is a complex entity and phenomenon, manifesting as a multifaceted subjective experience and a dynamically changing process that appears in stages. Both the individual and the employer can apply different types of interventions at various stages of burnout to alleviate or prevent undesired symptoms. It is important that, beyond the individual level (which is always present in practice), the organizational structure also serves as an effective intervention point for preventing burnout and improving the condition of exhausted colleagues (West et al., 2016).

From a societal context perspective, it is crucial to acknowledge that addressing burnout, implementing burnout prevention strategies, and supporting exhausted healthcare professionals constitute essential working conditions in emotionally demanding occupations. In the absence of such measures, individual motivation is likely to diminish, and the quality of healthcare provision may consequently deteriorate (Salvagioni et al., 2017). Given the nature of burnout, it can be conceptualized as a process without a distinct initial phase; individuals are effectively already in the early stage of burnout upon entering the workforce. This understanding shapes the scope and timing of preventive interventions. Accordingly, organizational structures that provide mental health preparedness and supportive programs for both new entrants and existing staff are instrumental in creating an environment conducive to the development of adaptive individual coping mechanisms.

The stages of burnout do not always follow a linear progression, and the intensity and subjective

experience of symptoms may vary between individuals. Table 3 aims to illustrate the distinct phases of burnout along with their typical symptomatology, while also highlighting potential intervention strategies at both individual and organizational levels.

From the individual's perspective, organizing regular educational programs aimed at sensitization regarding the selection of adaptive coping strategies and the support of health-promoting behaviors greatly assists the person in recognizing their own responsibility in the development, prevention, and management of burnout symptoms. Occupational health services may represent crucial screening points, as they regularly monitor employees' conditions; mental status monitoring through the regular use of questionnaires can be implemented cost-effectively. Early detection is of paramount importance in this context as well. Mental health counselors, health psychologists, and clinical psychologists can all be involved in the prevention and treatment of burnout. Individuals experiencing burnout are less likely to seek adequate help for themselves and are more prone to maladaptive stressrelief behaviors, which often further deteriorate their health status (e.g., pathological alcohol consumption, smoking, binge eating, unhealthy diet, sedentary lifestyle). Developing stress-management skills (relaxation, autogenic training, mindfulness, etc.) and communication competencies (assertive communication, emotional expression, etc.) can provide effective tools for preventing burnout (West et al., 2016).

Informational materials and lectures related to burnout serve the purpose of sensitization; due to the continuously existing risk, constant vigilance and self-monitoring are necessary. It is worthwhile to develop burnout management strategies both at the organizational and individual levels, and although there is limited literature on this topic, the combination of the two approaches likely represents the most effective solution (West et al., 2016; Hlubocky et al., 2017). Demerouti et al. (2021), in their review article, draw attention to new directions in burnout research, highlighting, among other points, the necessity of examining the contextual antecedents of burnout and the importance of prevention (Ónody, 2001).

SUMMARY

The prevalence of distress and burnout among healthcare workers, particularly those engaged in oncological care, is notably high. Individual

Table 3. Intervention possibilities corresponding to the levels and stages of burnout in oncology care, reflected by characteristic symptoms

Stages of Burnout and Symptom Profile	Typical Expressions	Individual-Level Intervention Options	Organizational / Employer- Level Interventions
Early Warning Signs (transient fatigue, mild irritability, decreased enthusiasm, rarely: sleep disturbance)	"Lately I find it harder to disconnect after work." "This job used to bring me more joy, now it feels like routine."	 Self-awareness practices, conscious recovery Establishing and strengthening recreational habits Stress monitoring 	- Access to supervision - Psychoeducation (on burnout and coping) - More flexible work organization
Mild Emotional Exhaustion (persistent fatigue, decreased motivation, irritability, difficulty concentrating)	"I wake up tired every Monday." "I feel less able to focus on patients."	 Relaxation techniques (e.g., autogenic training) Practicing mindfulness Developing communication skills 	- Balint groups, team discussions - Organizational culture with continuous feedback
Depersonalization, Cynical Attitude (emotional numbness, apathy, increased detachment from patients, irritability)	"I no longer know what to say to these patients." "Sometimes I feel completely indifferent."	 Individual psychological counseling Redefining value-based work Consciously reorganizing workplace relationships 	- Mentorship programs - Career-oriented supervision - Strengthening feedback systems
Performance Decline, Hopelessness (feelings of failure, uselessness, slowed pace, autopilot functioning)	"No matter what I do, it's never enough." "I've lost faith that my work matters."	Psychotherapy (individual or group) Relearning coping strategies Recovery break if needed	- Temporary job modification - Flexible reintegration plans - Supportive leadership moni- toring
Severe Burnout, Psychosomatic Symptoms (insomnia, somatic complaints, anxiety, isolation, apathy)	"I can barely get out of bed, often cry before work." "I feel physically unwell, but I can't stop."	- Clinical psychological or psychiatric help - Crisis intervention - Sick leave, recovery time	- Implementation of burnout protocol - Rehabilitation programs - Work ability assessment and gradual reintegration

determinants-such as emotional regulation capacity, empathy skills, perceived social support, coping abilities, and perceived stress levels—play a fundamental role in the stress experienced during work, thereby offering opportunities for targeted burnout prevention interventions. Burnout among professionals leads to deterioration in the quality of care, reduced productivity, and compromised service standards. Therefore, it is both the responsibility and interest of healthcare providers (hospitals, etc.) and other health organizations to develop targeted intervention plans aimed at preventing or mitigating the emotional burden and exhaustion of their staff. Effective burnout prevention requires complex, multi-level interventions encompassing individual, organizational, and societal dimensions. Burnout is a highly complex phenomenon and issue that affects not only the health of care providers but also impacts patients and the functioning of the healthcare system as a whole. The importance of burnout prevention and management is indisputable, and it has become clear that it must be addressed not only as an individual concern but also as a systemic

issue. It is imperative that at the societal level, it becomes widely accepted that burnout prevention is an essential working condition for professions involving emotional labor.

Burnout prevention does not solely require longterm systemic changes but also depends on daily decisions. At the institutional level, short-term progress can be achieved through the implementation of regular supervision, professional mentorship support, and psychoeducational or sensitization programs (conducted at the workplace, in further training sessions, conferences, etc.), alongside more flexible work organization and the practice of supportive organizational and leadership attitudes. At the individual level, stress monitoring, establishing good practices that support regeneration, and the development of communication skills represent immediately deployable tools. It is essential for both employees and organizations to recognize that bearing psychological burdens is not a sign of personal weakness but a challenge inherent to the profession, which necessitates continuously renewed, structured, and deliberate responses.

FUTURE RESEARCH PERSPECTIVES:

Although the present study does not include original empirical data, the reviewed literature clearly indicates that burnout research within the field of oncology offers numerous directions for future investigation. It is crucial to initiate longitudinal studies examining how burnout develops, deepens, or potentially resolves over the course of a professional career. Further exploration is warranted into why certain personality types or coping strategies render some healthcare workers more vulnerable, while others remain more resilient. Additional research is also needed to better understand which organizational supports—such as supervision, stress management training, or a supportive workplace culture—can effectively reduce the risk of burnout. Future studies will be most valuable if they incorporate not only individual experiences but also organizational and systemic factors.

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CORRESPONDING AUTHOR: Peter Kovacs E-mail: kovacs.peter@oncol.hu

REFERENCES

- Ádám S, Nistor A, Nistor K, et al. A kiégés és a depresszió diagnosztizálásának elősegítése demográfiai és munkahelyi védőés kockázati tényezőik feltárásával egészségügyi szakdolgozók körében. Orv Hetil. 2015; 156: 1288-1297.
- Allegra CJ, Hall R, Yothers G. Prevalence of burnout in the US oncology community: results of a 2003 survey. J Oncol Pract. 2005; 1: 140-147.
- Atroszko PA, Demetrovics Z, Griffiths MD. Work addiction, obsessive-compulsive personality disorder, burn-out, and global burden of disease: Implications from the ICD-11. Int J Environ Res Public Health. 2020; 17: 660.
- Balog B, Palotai G, Szijjártó L, et al. Győr-Moson-Sopron vármegye orvosainak körében gyakori a kiégés. Orv Hetil. 2021; 165(21): 822-831.
- Bordás A. kiégés-szindróma a külföldi és a hazai szakirodalomban. Educ. 2010; 19: 666-672.
- Copur MS. Burnout in Oncology. Oncol (Williston Park, NY). 2019; 33: 687522-687522.
- Czeglédi E, Tandari-Kovács M. A kiégés előfordulása és megelőzési lehetőségei ápolók körében. Orv Hetil. 2019; 160: 12-19.
- Cseh S, Fináncz J, Sipos D, et al. Betegellátásban dolgozók munkahelyi jóllétének vizsgálata két Zala megyei kórházban. Orv Hetil. 2022; 163: 759-766.
- Demerouti E, Bakker AB, Peeters MC, et al. New directions in burnout research. Eur J Work Org Psych. 2021; 30: 686-691.
- Edelwich J, Brodsky A. (ed.): Burnout: Stages of Disillusionment in the Helping Professions. Dordrecht: Kluwer Academic, Plenum Publishers, 1980
- Eelen S, Bauwens S, Baillon C, et al. The prevalence of burnout among oncology professionals: oncologists are at risk of developing burnout. Psycho-Oncol, 2014; 23: 1415-1422.
- 12. Freudenberger HJ. Staff burn-out. J Soc Issues. 1974; 30: 159-165.
- Galaiya R, Kinross J, Arulampalam T. Factors associated with burnout syndrome in surgeons: a systematic review. Ann R Coll Surg Engl. 2020; 102: 401-407.
- Gribben L, Semple CJ. Factors contributing to burnout and work-life balance in adult oncology nursing: an integrative review. Eur J Oncol Nurs. 2021; 50: 101887.
- 15. Győrffy Z, Girasek E. Kiégés a magyarországi orvosok körében. Kik a legveszélyeztettetbek? Orv Hetil. 2015; 156: 564-570.
- Hegedűs K, Riskó Á, Mészáros E. A súlyos betegekkel foglalkozó egészségügyi dolgozók testi és lelki állapota. Leg Art Med, 2004: 14: 786—793.
- Herman J. Trauma és gyógyulás: Az erőszak hatása a családon belüli bántalmazástól a politikai terrorig. Budapest: Háttér Kiadó – NANE Egyesület, 2011
- Hlubocky FJ, Back AL, Shanafelt TD. Addressing burnout in oncology: why cancer care clinicians are at risk, what individuals can do, and how organizations can respond. Am Soc Clin Oncol Educ Book. 2016; 36: 271-279.
- Hlubocky FJ, Rose M, Epstein, RM. Mastering resilience in oncology: learn to thrive in the face of burnout. Am Soc Clin Oncol Educ Book. 2017; 37: 771-781.
- Kovács M, Kovács E, Hegedűs K. Is emotional dissonance more prevalent in oncology care? Emotion work, burnout and coping. Psycho-Oncol. 2010; 19: 855-862.
- Kovács M, Kovács E, Hegedűs K. Az érzelmi munka és a kiégés összefüggései egészségügyi dolgozók különböző csoportjaiban. Mentálhig Pszichoszom. 2012; 13: 219-241.

- Kulcsár Zs. (ed.) Egészségpszichológia. ELTE Eötvös Kiadó, Budapest, 2002 [
- 23. Lee RT, Seo B, Hladkyj S, et al. Correlates of physician burnout across regions and specialties: a meta-analysis. Hum Resour Health. 2013; 11: 1-16.
- Maslach C. A multidimensional theory of burnout. [Cooper CL (ed.) Theories of organizational stress.] Oxford University Press, Oxford, 1998; 68: 16
- Medisauskaite A, Kamau C. Prevalence of oncologists in distress: Systematic review and meta-analysis. Psycho-oncol. 2017; 26: 1732-1740
- Medscape National Physician Burnout & Suicide Report 2020: The Generational Divide. https://www.medscape.com/ slideshow/2020-lifestyle-burnout-6012460#01 (letöltve: 2023 03 27)
- 27. Murali K, Banerjee S. Burnout in oncologists is a serious issue: what can we do about it?. Cancer Treat Rev. 2018; 68: 55-61.
- Ónody S. Kiégési tünetek (burnout szindróma) keletkezése és megoldási lehetőségei. Új Ped Szem. 2001; 5: 81-85.
- Pines A. Burnout: an existential perspective. In: W.B. Schaufeli,
 C. Maslach & T. Marek (eds) Professional Burnout: Recent Developments in Theory and Research. Taylor & Francis, Washington, Dc. pp. 33–51.
- Queiros C, Carlotto MS, Kaiseler M, et al. Predictors of burnout among nurses: An interactionist approach. Psicothema. 2013; 25: 330-335.
- Rath KS, Huffman LB, Phillips GS, et al. Burnout and associated factors among members of the Society of Gynecologic Oncology. Am J Obstet Gynecol. 2015; 213: 824-e1.

- Salvagioni DAJ, Melanda FN, Mesas AE, et al. Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PloS one. 2017; 12: e0185781.
- Schmidbauer W. (ed.) The unaided helper [Schmidbauer W. (ed.) Die hilflosen Helfer.] Rohwolt, Reinbek. 1977
- 34. Shanafelt TD, Dyrbye L. Oncologist burnout: causes, consequences, and responses. J Clin Oncol. 2012; 30: 1235-1241.
- Shanafelt TD, Gradishar WJ, Kosty M, et al. Burnout and career satisfaction among US oncologists. J Clinic Oncol. 2014; 32: 678.
- Sipos D, Kunstár O, Kovács A, et al. Burnout among oncologists, nurses, and radiographers working in oncology patient care during the COVID-19 pandemic. Rad. 2023; 29: 503-508.
- Sipos D, Varga V, Pandur AA, et al. Radiológiai osztályon dolgozó szakdolgozók kiégési szintje Magyarországon. Orv Hetil. 2019; 27: 1070-1077.
- Szemerey M. A viszontáttétel és az empátia terhei. Imág Bud. 2016; 5: 25–40.
- West CP, Dyrbye LN, Erwin PJ, et al. Interventions to prevent and reduce physician burnout: a systematic review and metaanalysis. The Lancet. 2016; 388: 2272-2281.
- World Health Organization. International Classification of Diseases (ICD). https://www.who.int/standards/classifications/ classification-of-diseases [letöltve: március 25, 2023]
- Zapf D. Emotion work and psychological strain: A review of the literature and some conceptual considerations. Hum Res Man Rev. 2002; 12: 237—268.

A kiégés specifikus szempontjai az onkológiai szakellátást végzők körében

Bevezetés: A kiégés komplex és hosszú távú negatív következményekkel járó, a segítő hivatásokban rendszeresen újratermelődő folyamat-jellegű jelenség. A kiégéshez vezető pszichés kockázatok, valamint a védőfaktorok azonosítása kulcsfontosságú a hatékony prevenció és a célzott állománygondozás szempontjából. Ez kiemelt feladatot jelent az olyan érzelmileg megterhelő szakterületeken, mint az onkológia, ahol a munkavégzés egyrészt fokozott érzelmi sérülékenységet eredményez, másrészt speciális intervenciós kihívásokat is támaszt. **Célkitűzés:** A tanulmány célja, hogy bemutassa az onkológiai ellátásban dolgozók körében jelentkező kiégés jellegzetességeit, illetve specifikus rizikótényezőit, valamint feltárja azokat a protektív tényezőket, amelyek szerepet játszhatnak a kiégés megelőzésében és enyhítésében. Módszer: A tanulmány szakirodalmi forrásokra alapozva tekinti át a mindennapi onkológiai ellátás gyakorlata számára is tetten érhető egyéni és szervezeti szintű kihívásokat és problémaköröket a lehetséges beavatkozások és prevenciós lehetőségek összefüggésében. Eredmények: Az onkológiai ellátást végzők fokozott és speciális érzelmi megterhelésnek vannak kitéve, amely kedvezőtlenül befolyásolja mentális állapotukat, csökkenti teljesítményüket, valamint negatív hatással van a betegellátás színvonalára is. Az elemzés során kiemelt szerepet kap az egyéni reziliencia, valamint a jóllét-monitorozás, illetve az intézményi szintű beavatkozási lehetőségek bemutatása. Megbeszélés: A kiégés megelőzése integrált, több szintű beavatkozást igényel, amely figyelembe veszi az egyéni erőforrásokat és az intézményi kultúrát is. A védőfaktorok megerősítése kulcsfontosságú a hosszú távú mentális jóllét fenntartásához. A prevenció érdekében szükséges a rendszeres kiégés- és jóllét-monitorozás, az egyéni erőforrások kibontakoztatása, valamint a támogató szervezeti kultúra kialakítása. Következtetés: A kiégés az onkológiai ellátásban dolgozók körében nemcsak egyéni, hanem rendszerszintű kihívás is, a kimerülő kollégák támogatása pedig alapvető munkafeltétel. A megelőzés alapja a jól működő pszichológiai támogatórendszer, az intézményi felelősségvállalás és a dolgozók jóllétének célzott elősegítése.

Kulcsszavak: kiégés, burnout, onkológia, prevenció