

THE IMPACT OF WORK-RELATED STRESS ON THE DEVELOPMENT OF BINGE EATING DISORDER AMONG HEALTHCARE PROFESSIONALS

Francesco Pastore¹, Elisa Albino², Emanuela Domenicone³, Larissa Domeneck⁴,
Stephanie Domeneck Nissan⁴ & Antonella Litta²

¹Department of Translational Biomedicine and Neuroscience (DiBraiN), University of Bari "Aldo Moro", Bari, Italy

²Department of Precision and Regenerative Medicine and Ionian Area (DiMePRE-J),
University of Bari "Aldo Moro", Bari, Italy

³Department of Medical Specialties – Neurology Unit, San Filippo Neri Hospital, ASL Roma 1, Roma, Italy

⁴Interdisciplinary Department of Medicine, University of Bari "Aldo Moro", Bari, Italy

SUMMARY

Background: Binge Eating Disorder (BED) is a prevalent and under-recognized eating disorder associated with psychological distress and maladaptive coping. Healthcare professionals are frequently exposed to high levels of occupational stress, which may increase their vulnerability to disordered eating behaviors, including BED. This study aimed to explore the relationship between work-related stress, emotional exhaustion and the risk of developing binge eating symptoms among healthcare professionals in Italy.

Methods: A cross-sectional online survey was conducted between May and July 2024 among 312 healthcare professionals. Participants completed a structured questionnaire comprising sociodemographic data, stress-related variables, the Emotional Exhaustion subscale of the Maslach Burnout Inventory (MBI) and the Binge Eating Scale (BES).

Results: The sample was predominantly female (81.7%) with a mean age of 37.6 years. Twenty percent reported a history of eating disorders and 60.3% reported stress or anxiety. Significant associations were found between BES scores and stress-related variables, including anxiety, emotional exhaustion, eating during work breaks and vending machine use ($p < 0.005$). Higher BES scores were correlated with burnout symptoms such as fatigue, emotional drain and inability to cope. A strong association also emerged between BES scores and the perceived impact of stress on eating habits.

Conclusions: Work-related stress and burnout symptoms are significantly associated with binge eating tendencies among healthcare professionals. Preventive strategies - such as institutional stress management programs and access to healthy food - are essential to promote well-being and prevent maladaptive eating behaviors in high-stress healthcare environments.

Key words: binge Eating Disorder (BED) - work-related stress - healthcare professionals

* * * * *

INTRODUCTION

Eating disorders are characterized by dysfunctional eating behaviors aimed at controlling body weight, often resulting in significant physical and psychological consequences. Since 2013, Binge Eating Disorder (BED) has been formally recognized as a distinct diagnosis in both the DSM-5 TR and ICD-11 (Giel et al. 2022). BED is defined by recurrent episodes of excessive food consumption accompanied by a perceived loss of control, typically associated with marked psychological distress (Loriedo et al. 2022). Common manifestations include eating rapidly, eating beyond satiety, consuming food in the absence of physical hunger, eating alone due to embarrassment, and experiencing subsequent feelings of guilt, depression or disgust (Mars et al. 2024). Unlike bulimia nervosa, BED does not involve compensatory behaviors such as purging or excessive exercise (Loriedo et al. 2022). BED most often emerges in late adolescence or early adulthood (Wade et al. 2017). Epidemiological data indicate a higher prevalence among women, although incidence in men is steadily increasing. Lifetime prevalence is estimated at 3.5% in women and 2% in men (ISS,

2017). Among eating disorders, BED has the highest prevalence and is increasingly recognized for its association with obesity, depression, anxiety and a broad range of psychological and physical comorbidities. Stress is a major risk factor for BED. It plays a pivotal role in altering eating behavior and modulating emotional responses to food (Lim et al. 2021). Stress impacts both psychological and physiological systems, particularly the hypothalamic-pituitary-adrenal (HPA) axis, resulting in elevated cortisol levels that may promote emotional eating and impaired impulse control (Grossi et al. 2012; Barbati 2023). Individuals with BED often exhibit heightened sensitivity to stress, a pattern also observed in anorexia nervosa (Barbati 2023). Healthcare professionals, who are responsible for preventive, curative, and rehabilitative care, are routinely exposed to high levels of emotional strain. Factors such as chronic stress, extended shifts, insufficient rest, exposure to patient suffering and limited access to healthy food options contribute to emotional exhaustion and burnout in this population (Rink et al. 2023; Hazmi et al. 2018). Although not all individuals with anxiety develop BED, the co-occurrence of high stress and trait anxiety - especially in those with problematic eating

habits or body image concerns - can significantly elevate the risk of binge eating episodes (Barbati 2023). According to "escape theory," binge eating may function as a maladaptive coping mechanism that offers temporary relief from negative emotional states (Heatherton & Baumeister 1991). However, this behavior often leads to worsening psychological symptoms over time. Nurses and other healthcare workers are particularly susceptible to emotional burnout, which adversely affects both personal health and professional performance (Petersen 2022). Despite the clear clinical relevance, the relationship between occupational stress and the risk of developing BED among healthcare professionals remains underexplored. This gap in the literature underscores the need for further research aimed at understanding and preventing disordered eating in high-stress healthcare environments. Promoting self-care, reducing stigma and implementing targeted prevention strategies are essential to safeguarding the mental health of healthcare providers (Sørivold et al. 2021). This study aimed to investigate the relationship between work-related stress, emotional exhaustion and binge eating symptoms among healthcare professionals, with the goal of identifying potential risk factors and informing preventive strategies.

SUBJECTS AND METHODS

A cross-sectional study was conducted at the national level in Italy between May and July 2024. The final sample consisted of 312 healthcare professionals. Inclusion criteria were provision of informed consent and active employment within the healthcare sector. Exclusion criteria included refusal to participate or not meeting the defined professional criteria. Data were collected via a structured, anonymous questionnaire comprising 38 items, divided into four sections. The first section captured sociodemographic information (e.g., age, gender, professional role, work setting, region of origin, physical activity, dietary habits, perceived stress and history of eating disorders). The second section explored the relationship between work-related stress and eating behavior, including items on burnout awareness, availability of stress management resources and use of vending machines. The third section included six items from the Emotional Exhaustion (EE) subscale of the Maslach Burnout Inventory (MBI), which assesses perceived emotional depletion due to occupational strain (Maslach et al. 1996). The fourth section consisted of the Binge Eating Scale (BES), a validated 16-item instrument used to evaluate the presence and severity of binge eating symptoms (Gormally et al. 1982). Respondents selected the statement that best described their experience, and scores were classified as follows: <17 = low probability, $17-27$ = moderate probability, and >27 = high probability of BED. All participants provided

informed consent in accordance with ethical standards and data protection regulations. Descriptive statistics were used to summarize the sample. Inferential analysis included the Mann-Whitney U test and the Kruskal-Wallis test to evaluate group differences. Spearman's rank correlation coefficients (ρ) were used to assess associations between continuous and ordinal variables. The level of significance was set at $p < 0.005$. Binary variables (e.g., gender, stress, vending machine use, stress-related eating perception) were coded as 1 = "Yes" or "Female," and 2 = "No" or "Male." As a result, negative correlation coefficients reflect a positive association between the condition and higher BES scores.

RESULTS

The study sample included 312 healthcare professionals from across Italy. As shown in Table 1, the majority were female (81.7%), with a mean age of 37.6 years ($SD \pm 13.2$). Most participants (71.5%) were employed in healthcare professions, followed by the medical field (18.6%) and other sectors, including auxiliary (4.2%), scientific healthcare (2.2%), psychological (1.9%) and social services (0.6%). The most frequently reported professional roles were nurses (31.9%), physicians (19.0%) and professional educators (12.3%). Regarding work setting, 50.5% of participants were employed in hospitals and 36.6% in community-based services; the remaining worked in private practice (4.2%) or as freelancers (1.3%). A history of eating disorders was reported by 20.2% of participants. Physical activity was practiced by 48.1%, while only 18.3% followed a specific diet - primarily low-calorie (38.8%) and Mediterranean (18.4%) dietary patterns. Less common dietary regimens included low-carb, vegetarian and gluten-free options. In terms of psychological health, 60.3% reported experiencing stress or anxiety. Only 16.4% reported that their workplace provided stress management programs. Awareness of burnout syndrome was very high (94.9%). Eating behavior during work hours was common: 79.1% reported eating during breaks and 80.1% believed that work-related stress negatively influenced their eating habits. Regular use of vending machines was reported by 20.9% of participants, most of whom used them once or twice daily. Burnout levels, assessed via the EE subscale of the MBI, indicated moderate emotional exhaustion. Participants reported feeling emotionally drained ($M = 3.08$, $SD = 1.65$), fatigued at the end of the workday ($M = 3.82$, $SD = 1.60$) and tired upon waking ($M = 3.23$, $SD = 1.81$). A moderate perception of overworking was observed ($M = 3.49$, $SD = 1.82$), while lower scores were reported for stress due to interpersonal contact ($M = 2.11$, $SD = 1.84$) and feelings of being unable to cope ($M = 1.65$, $SD = 1.64$). The BES revealed that the majority of participants exhibited mild to moderate binge eating symptoms.

Table 1. Sociodemographic characteristics (n=312)

Characteristics	Mean - n (±SD)
Age (years)	37.63 (±13.23)
Gender	
Male	57 (18.3)
Female	255 (81.7)
Type of healthcare professional	
Nurse	99 (31.9)
Professional educator	38 (12.3)
Physiotherapist	34 (11)
Health educator	13 (4.2)
Speech therapist	17 (5.5)
Doctor	59 (5.5)
Midwife	10 (3.2)
Psychiatric rehabilitation technician	3 (1)
Laboratory technician	2 (0.6)
Orthopaedic technician	1 (0.3)
Dietician	3 (1)
TSRM	2 (0.6)
Healthcare assistant	1 (0.3)
Orthoptist	1 (0.3)
Prevention technician	1 (0.3)
Biologist	1 (0.3)
Psychologist	5 (1.6)
Chemical	1 (0.3)
Social assistant	2 (0.6)
Aso	2 (0.6)
Oss	11 (3.5)
Setting work	
Territory	113 (36.6)
Hospital	156 (50.5)
Private	13 (4.2)
Freelancer	4 (1.3)
Anything else	23 (7.4)
Have you ever suffered from eating disorders (DCA)?	
Yes	63 (20.2)
No	249 (79.8)
Do you play any sports?	
Yes	150 (48.1)
No	162 (51.9)
Do you follow a specific diet?	
Yes	57 (18.3)
No	255 (81.7)
If you answer yes, what specific diet do you follow?	
Mediterranean	9 (18.4)
Hypocaloric	19 (38.4)
Hypercaloric	1 (2)
Low carb	6 (12.2)
Vegan	1 (2)
Ketogenic	1 (2)
Protein diet	3 (6.1)
High protein	2 (4.1)
Gluten free	2 (4.1)
Dissociated	1 (2)
Nickel free	1 (2)
Do you suffer from anxiety and stress?	
Yes	188 (60.3)
No	124 (39.7)

Table 1. Continues

Characteristics	Mean - n (±SD)
Does your company offer work-related stress management courses?	
Yes	51 (16.4)
No	260 (83.6)
Do you know about “burnout syndrome”?	
Yes	295 (94.9)
No	16 (5.1)
Do you think work-related stress affects your eating habits?	
Yes	249 (80.1)
No	62 (19.9)
Do you often use vending machines to get food?	
Yes	65 (20.9)
No	246 (79.1)
If you answer yes, how many times do you go to the vending machines during working hours?	
Once a day	31 (41.9)
Twice a day	19 (25.7)
Three times a day	11 (14.9)
Once or more a week	4 (5.4)
Never	6 (8.1)
No response	3 (4.1)

Common behaviors included impulsive eating ($M = 0.75$, $SD = 0.83$), food cravings ($M = 0.71$, $SD = 0.67$) and guilt following overeating ($M = 0.66$, $SD = 0.76$). Moderate levels of impulse control and portion awareness were also noted ($M = 0.45$ and $M = 0.41$, respectively). Inferential analysis (Table 2) showed that participants with a prior history of eating disorders had significantly higher BES scores (Mann–Whitney $U = 3601.000$, $p < 0.001$). Higher BES scores were also observed among participants who reported stress and anxiety ($U = 7056.500$, $p < 0.001$), ate during work breaks ($U = 6721.000$, $p < 0.026$) or frequently used vending machines ($U = 4846.000$, $p < 0.001$). The perception that work-related stress influenced eating behavior was strongly associated with higher BES scores ($U = 4167.000$, $p < 0.001$). Significant differences in BES scores also emerged across professional categories (Kruskal–Wallis $H = 41.957$, $p < 0.004$). Emotional exhaustion was significantly associated with binge eating symptoms. Participants who reported feeling emotionally drained ($H = 27.244$, $p < 0.001$), fatigued at the end of the day ($H = 19.268$, $p < 0.001$), or overwhelmed by interpersonal demands ($H = 28.244$, $p < 0.001$) demonstrated significantly higher BES scores.

Spearman’s correlation analyses (Table 3) identified several significant associations. BES scores were inversely correlated with self-reported stress ($\rho = -0.335$, $p < 0.001$), vending machine use ($\rho = -0.278$, $p < 0.001$) and the perception that stress impacts eating behavior ($\rho = -0.319$, $p < 0.001$). The strongest correlation was observed between BES scores and prior eating disorder history ($\rho = -0.377$, $p < 0.001$). A weaker but significant

Table 2. Inferential analysis by group (Mann-Whitney/Kruskal-Wallis)

Variable	Statistic/measures	Value	Signif. (p value)
Have you ever suffered from eating disorders? (score bes)	Mann-Whitney U	3601.000	p < 0.001
	Wilcoxon W	34726.000	-
	Z	-6.647	-
Do you practice sport? (Score bes)	Mann-Whitney U	9967.000	P < 0.006
	Wilcoxon W	21292.000	-
	Z	-2.748	-
Do you suffer from anxiety and stress) (score bes)	Mann-Whitney U	7056.500	p < 0.001
	Wilcoxon W	14806.500	-
	Z	-5.911	-
Type of healthcare profession	Kruskal-Wallis H	41.957	p < 0.004
	Df	21	-
During breaks from work, do you eat anything?	Mann-Whitney U	6721.000	p < 0.026
	Wilcoxon W	8999.000	-
	Z	-2.233	-
Do you think work-related stress affects your eating habits? (score bes)	Mann-Whitney U	4167.000	p < 0.001
	Wilcoxon W	6120.000	-
	Z	-5.619	-
Do you often use vending machines to take food?	Mann-Whitney U	4846.000	p < 0.001
	Wilcoxon W	35227.000	-
	Z	-4.894	-
I feel emotionally exhausted from my work	Kruskal-Wallis H	27.244	p < 0.001
	Df	6	-
I feel exhausted at the end of the day	Kruskal-Wallis H	19.268	p < 0.001
	Df	6	-
I feel tired when i wake up in the morning and must face another workday	Kruskal-Wallis H	12.833	p < 0.004
	Df	6	-
I think I work too hard	Kruskal-Wallis H	10.869	P > 0.093
	Df	6	-
Working directly with people creates too much tension for me.	Kruskal-Wallis H	28.244	p < 0.001
	Df	6	-
I feel like I can't take it anymore	Kruskal-Wallis H	34.553	p < 0.001
	Df	6	-

correlation was found with eating during work breaks ($\rho = -0.127$, $p = 0.025$). These inverse values reflect the binary coding used, where lower values correspond to affirmative responses and are associated with higher BES scores.

DISCUSSION

Eating disorders are multifactorial conditions often linked to psychological distress, including elevated levels of stress, anxiety, and low self-esteem (SIPA 2023; Fairburn 2008). Among healthcare professionals, chronic occupational stress may increase vulnerability to disordered eating behaviors, particularly in individuals with pre-existing difficulties in emotional regulation or body image dissatisfaction (Barbati 2023). This study aimed to investigate the association between work-related stress and binge eating symptoms among healthcare professionals in Italy. Despite growing attention to mental health in healthcare settings, the intersection between occupational stress and eating

behaviors remains insufficiently explored. The present sample, predominantly female (81.7%) and relatively young (mean age 37.6 years), reflects characteristics previously associated with greater engagement in nutrition-related research (Fagerli et al. 1999; Litta et al. 2024). Most participants were employed in hospitals and belonged to nursing or allied health professions - categories frequently exposed to high levels of occupational strain (Mohajan et al. 2023). Approximately 20% of participants reported a prior history of eating disorders, while over 60% endorsed current symptoms of stress or anxiety. Yet only 16% indicated that their workplace offered formal stress management programs, suggesting a significant gap in institutional support (Catapano et al. 2023). Although awareness of burnout was high (94.9%), the persistence of maladaptive coping behaviors such as stress-related eating points to a disconnect between knowledge and effective behavioral responses (Nabadda 2012). Eating during work breaks emerged as a common strategy for emotional regulation, with many participants reporting frequent reliance on food as a coping mechanism.

Table 3. Correlation matrix among key variables

Variable	Correlated With	Correlation Coefficient	p-value
Gender	Do you follow a specific diet?	0.138	0.015
Gender	Do you suffer from stress and anxiety?	0.158	0.005
Gender	Do you take food during your breaks from work?	0.217	0.000
Gender	Score BES (Binge Eating Scale)	-0.143	0.011
What kind of health profession do you practice?	Have you ever suffered from eating disorders (DCA)?	0.163	0.004
What kind of health profession do you practice?	Do you know the 'burnout' syndrome?	0.176	0.002
What kind of health profession do you practice?	Do you often use vending machines to take food?	-0.155	0.006
What kind of health profession do you practice?	Score BES	-0.120	0.035
In which setting does he work?	Do you suffer from stress and anxiety?	-0.128	0.024
Have you ever suffered from eating disorders (DCA)?	Do you suffer from stress and anxiety?	0.245	0.000
Have you ever suffered from eating disorders (DCA)?	Do you think work-related stress affects your eating habits?	0.151	0.007
Have you ever suffered from eating disorders (DCA)?	Do you think work-related stress affects your eating habits?	0.213	0.000
Have you ever suffered from eating disorders (DCA)	Score BES	-0.377	0.000
Do you play sports?	Score BES	0.156	0.006
Do you follow a specific diet?	Do you take food during breaks from work?	0.127	0.025
Do you suffer from stress and anxiety?	Do you think work-related stress affects your eating habits?	0.284	0.000
Do you suffer from stress and anxiety?	Score BES	-0.335	0.000
Do you know burnout syndrome?	Do you think work-related stress affects your eating habits?	-0.116	0.041
Do you take food during breaks from work?	Do you think work-related stress affects your eating habits?	0.150	0.008
Do you take food during breaks from work?	Do you often use vending machines to take food?	0.135	0.017
Do you take food during breaks from work?	Score BES	-0.127	0.025
Do you think work-related stress affects your eating habits?	Score BES	-0.319	0.000
Do you often use vending machines to take food?	Score BES	-0.278	0.000

While this may offer temporary relief, it can contribute to unhealthy patterns - particularly when vending machines are the primary source of nourishment (Gheonea 2023; Utter et al. 2023). These findings underscore concerns about dietary quality and nutritional support in clinical workplaces. The MBI findings revealed moderate levels of emotional exhaustion, especially related to end-of-day fatigue and sleep-related tiredness – hallmarks of burnout in high-pressure clinical environments (Sutherland et al. 2023; Kowalczyk et al. 2020). These symptoms were significantly associated with elevated BES scores, suggesting that emotional exhaustion may drive maladaptive eating behaviors.

Although most participants did not meet full diagnostic criteria for BED, they reported behaviors characteristic of subclinical disordered eating, including impulsivity, food cravings and post-consumption guilt. These patterns are consistent with the "escape theory" of binge eating, which posits that individuals engage in dysregulated eating to distract themselves from negative affective states (Heatherton & Baumeister 1991). The current findings reinforce prior evidence linking emotional exhaustion to disordered eating trajectories in healthcare populations (Mayo Clinic 2024; Giel et al. 2023). Statistically significant associations between BES scores and variables such as perceived stress,

vending machine use and burnout further support the hypothesis that work-related stress contributes to disordered eating. These results highlight the importance of institutional efforts to implement preventive measures aimed at both stress reduction and healthy behavioral coping (Wiley et al. 2009). Several limitations should be acknowledged. First, the use of an online, self-report questionnaire may have introduced response bias or social desirability effects. Second, the overrepresentation of female participants may limit the generalizability of findings across genders. Third, the absence of data on work schedules, rest breaks and organizational climate restricts the ability to contextualize stress exposure. Future research should integrate qualitative and longitudinal designs to better capture the mechanisms linking work conditions and eating behaviors.

CONCLUSIONS

This study explored the relationship between work-related stress and binge eating tendencies among healthcare professionals. The findings suggest that emotional exhaustion and burnout are significantly associated with maladaptive eating behaviors, including symptoms consistent with subclinical BED. Environmental factors - such as the availability of high-calorie, low-nutrition food options in hospital settings - may further exacerbate these tendencies. Preventive strategies should prioritize stress reduction, emotional regulation training and promotion of healthy eating environments in healthcare institutions. The implementation of structured psychological support services and evidence-based stress management programs could mitigate the negative impact of occupational stress on eating behaviors. Improving the well-being of healthcare professionals is essential not only for individual health, but also for the quality and sustainability of care delivery. Future studies are warranted to evaluate targeted interventions and to deepen the understanding of how institutional culture and workplace resources shape the relationship between stress and eating behavior in clinical populations.

Acknowledgements: None.

Conflict of interest: None to declare.

Contribution of individual authors:

Francesco Pastore, Elisa Albino, Emanuela Domenicone, Larissa Domeneck & Stephanie Domeneck Nissan: conceptualization, data collection manuscript preparation, writing, bibliographic research and statistical analysis.

Antonella Litta: critical revision of the manuscript.

All authors approved the final manuscript.

References

1. Barbati V. *Eating disorders and stress: a complex relationship*. State of Mind. 2023 Available from: <https://www.stateofmind.it/>
2. Catapano P, Cipolla S, Sampogna G, Perris F, Luciano M, Catapano F, et al. *Organizational and individual interventions for managing work-related stress in healthcare professionals: a systematic review*. *Medicina (Kaunas)*. 2023;59(10):1866.
3. Fagerli RA, Wandel M: *Gender differences in opinions and practices with regard to a "healthy diet"*. *Appetite* 1999; 32:171-190
4. Fairburn CG. *Cognitive behavior therapy and eating disorders*. New York: Guilford Press; 2008. Available from: <https://psycnet.apa.org/record/2008-07785-000>
5. Gheonea TC, Oancea CN, Mititelu M, Lupu EC, Ioniță-Mîndrican CB, Rogoveanu I. *Nutrition and mental well-being: exploring connections and holistic approaches*. *J Clin Med*. 2023;12(22):7180.
6. Giel KE, Bulik CM, Fernandez-Aranda F, Hay P, Keski-Rahkonen A, Schag K, et al. *Binge eating disorder*. *Nat Rev Primers*. 2022;8(1):16.
7. Gormally J, Black S, Daston S, Rardin D. *The assessment of binge eating severity among obese persons*. *Addict Behav* 1982;7(1):47-55.
8. Grossi A, Germani E, Del Forno D, Covelli V, Leonardi M. *Emotional Eating e Binge Eating: stress e disturbi del comportamento alimentare*. In: *Stress e disturbi da somatizzazione*. Milano: Springer; 2012.
9. Hazmi TM, AlGhamdi A, Abdulmajeed I. *Eating habits among healthcare providers during working hours at National Guard Health Affairs Riyadh, Saudi Arabia*. *Int J Med Res Health Sci*. 2018;7:1-14.
10. Heatherton, T. F., & Baumeister, R. F. (1991). *Binge eating as escape from self-awareness*. *Psychological Bulletin*, 110(1), 86-108.
11. Istituto Superiore di Sanità. *Overweight – Epidemiological data*. Rome: Italian National Institute of Health (ISS); 2017 Available from: <https://www.epicentro.iss.it/obesita/epidemiologia-mondo>
12. Kandiah J, Yake M, Willett H. *Effects of stress on eating practices among adults*. *Fam Consum Sci Res J*. 2008;37(1):27-38.
13. Kowalczyk K, Krajewska-Kulak E, Sobolewski M. *Working excessively and burnout among nurses in the context of sick leaves*. *Front Psychol*. 2020;11:285.
14. Lim MC, Parsons S, Goglio A, Fox E. *Anxiety, stress, and binge eating tendencies in adolescence: a prospective approach*. *J Eat Disord*. 2021;9(1):94.
15. Litta A, Nannavecchia AM, Ferrandina M, Favia V, Minò MV, Vacca A. *Nutrition in Mental Health: Insight from a Survey Among Psychiatrists and Psychologists*. *Psichiatria Danub* 2024; 36(Suppl 2):236-240. PMID: 39378477.
16. Lorio C, Bianchi G, Perrella C. *Binge eating disorder: aspetti clinici, nosografici e terapeutici*. *J Psychopathol*. 2022 [cited 2025 Jul 10]. Available from: <https://old.jpsychopathol.it/article/binge-eating-disorder-aspetti-clinici-nosografici-e-terapeutici/>
17. Mars JA, Iqbal A, Rehman A. *Binge eating disorder*. In: *StatPearls*. Treasure Island (FL): StatPearls Publishing; 2024. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK551700/>

18. Maslach Burnout Inventory (MBI). *Statistics Solutions*; 2023 [cited 2025 Jul 10]. Available from: <https://www.statisticssolutions.com/free-resources/directory-of-survey-instruments/maslach-burnout-inventory-mpi/>
19. Mayo Clinic. Binge eating disorder: Symptoms and causes. *Mayo Clinic*; 2024 [cited 2025 Jul 10]. Available from: <https://www.mayoclinic.org/diseases-conditions/binge-eating-disorder/symptoms-causes/syc-20353>
20. Mohajan HK, Mohajan B. A review on binge eating disorder and its treatments. *J Psychol Clin Psychiatry*. 2013;1(1):10–15.
21. Nabadda M. Knowledge and perception toward professional burnout among nurses caring for patients with terminal illnesses. *Hospice Africa Uganda and Uganda Cancer Institute*; 2012 [cited 2025 Jul 10]. Available from: <https://www.researchgate.net/publication/236881072>
22. Petersen J, Wendsche J, Melzer M. Esaurimento emotivo degli infermieri: prevalenza, fattori di rischio psicosociali e associazione al congedo per malattia. *J Adv Nurs*. 2023; 79(1):182-193.
23. Rink LC, Oyesanya TO, Adair KC, Humphreys JC, Silva SG, Sexton JB. Stressors among healthcare workers: a summative content analysis. *Glob Qual Nurs Res*. 2023;10:23333936231161127.
24. Søvold LE, Naslund JA, Kousoulis AA, Saxena S, Qoronfleh MW, Grobler C, et al. Prioritizing the mental health and well-being of healthcare workers: an urgent global public health priority. *Front Public Health*. 2021;9:679397.
25. Sutherland C, Smallwood A, Wootten T, Redfern N. Fatigue and its impact on performance and health. *Br J Hosp Med*. 2023;84(2):1–8.
26. Utter J, McCray S. Vending machines in Australian hospitals: are they meeting the needs of the consumer? *J Nutr Educ Behav*. 2021;53(2):183–186.
27. Wade T. Binge eating disorder. In: *Encyclopedia of Feeding and Eating Disorders*. 1st ed. Singapore: Springer; 2017.
28. Wiley. *Disordered eating and job stress among nurses*. *J Nurs Manag*. 2009;17(7):861–869

Correspondence:

Antonella Litta, MD, PhD

Department of Precision and Regenerative Medicine and Ionian Area (DiMePRE-I),

University of Bari "Aldo Moro"

Bari, Italy

E-mail: a.litta@hotmail.it