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Original Article

Burnout syndrome and (self-) dehumanization among nurses in Intensive Care Units [ICUs]: A cross-sectional study

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ABSTRACT

Introduction: Burnout and dehumanization are frequent psychological phenomena in healthcare environments, particularly among nurses. While dehumanization may serve as an adaptive mechanism to manage emotional strain and enhance clinical efficiency, excessive or prolonged exposure can lead to self-dehumanization and disrupt nurse–patient relationships, ultimately impairing the quality of care. Therefore, the primary objective of this study was to investigate the prevalence of burnout syndrome and (self-)dehumanization among ICU nurses and to examine the correlation between these phenomena.

Methods: A cross-sectional study was conducted among 78 volunteer nurses employed in intensive care units [ICUs] of Evangelismos General Hospital in Athens, Greece. Data were collected using three validated questionnaires based on the Oldenburg Burnout Inventory and the Dehumanization and Mechanistic Self-Dehumanization scales developed by Katerina Roupa. Statistical analyses included Mann–Whitney, Kruskal–Wallis, and Spearman's rho tests, with the significance level set at 0.05.

Results: Most participants were female (67.9%) and over 40 years old (55.2%). Low burnout levels were found in 76.9% of participants, moderate in 15.4%, and high in 7.7%. Higher burnout levels were observed among nurses with lower educational backgrounds, permanent contracts, one or two children, and fewer working hours. Male nurses demonstrated higher dehumanization and self-dehumanization scores than females. Work exhaustion was associated with males having 3–10 years of experience. A significant negative correlation was found between self-dehumanization and burnout. Additionally, nurses who tended to dehumanize their patients were more likely to self-dehumanize.

Conclusion: Although dehumanization and self-dehumanization may function as emotional regulation strategies against burnout, they have detrimental implications for nursing care and therapeutic relationships. Preventive interventions should aim to balance emotional resilience with patient-centered care.

Keywords: Burnout, Dehumanization, Nurses, Occupational Stress, Self-Dehumanization

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Introduction

Occupational burnout currently stands as one of the most critical psychosocial hazards threatening the stability of modern healthcare systems globally. This multifaceted syndrome is clinically delineated by a triad of symptoms: profound emotional exhaustion, the development of cynical or detached attitudes known as depersonalization, and a significantly diminished sense of personal professional accomplishment.[1] The intensive care unit (ICU) environment presents a uniquely demanding landscape; nursing professionals in this sector are incessantly subjected to extreme physical fatigue, severe emotional distress, and complex bioethical dilemmas, all of which substantially exacerbate the susceptibility to burnout syndrome.[2]

In the specific context of the Greek healthcare infrastructure, these systemic pressures are markedly intensified. The lingering repercussions of prolonged economic austerity have precipitated chronic staffing deficits and unfavorable patient-to-nurse ratios, thereby compounding the daily operational burden on medical staff.[3] Furthermore, the advent of the COVID-19 pandemic dramatically escalated this psychosocial load, triggering not only widespread burnout but also fostering subtle defense mechanisms such as emotional blunting and dehumanization. Consequently, the present study aims to rigorously examine the complex interrelationships between burnout, (self-)dehumanization, and empathy fatigue among nurses at "Evangelismos" General Hospital, Greece's largest tertiary institution.

The initial theoretical framework for burnout was established by Freudenberger in 1974,[4] describing it as a condition of severe physical and psychological fatigue stemming from prolonged occupational stress. Subsequently, Maslach and Jackson[1] (1981) systematized the syndrome through the Maslach Burnout Inventory (MBI), identifying three core components: emotional exhaustion, characterized by the draining of emotional reserves; depersonalization, involving a cynical or distant attitude towards care recipients; and reduced personal accomplishment, manifested as a sense of professional failure or incompetence. Recognizing its roots in the work environment, the World Health Organization has officially designated burnout as an "occupational phenomenon" within the ICD-11 framework.[5] In the nursing profession, the syndrome is frequently precipitated by systemic pressures such as rotating schedules, ethical conflicts, inadequate management, and constant confrontation with patient pain.[6,7] High Dependency Units (HDUs) represent exceptionally demanding settings where staff must handle intricate clinical cases, often with insufficient downtime for recovery or psychological backing.[8]

Continuous subjection to such intense environments may result in emotional numbing and the gradual decay of professional compassion, ultimately fostering dehumanization directed at both others and one's own self. Traditionally, has been interpreted as a protective strategy—a psychological shield allowing healthcare workers to detach from the anguish they witness.[9] Nevertheless, the theoretical perspective introduced by Haslam (2006) redefines this detachment as a fundamental denial of human attributes to oneself or other people.[10] This phenomenon manifests in two forms: animalistic, which negates features like civility and culture, or mechanistic, where one perceives themselves as an unfeeling automaton. Within the context of nursing, persistent depersonalization can progress into self-dehumanization, a state in which nurses adopt a self-perception of being merely functional tools for care delivery rather than independent human beings.[11] This transformation severely compromises empathy, heightens feelings of estrangement, and can sustain a destructive loop of occupational burnout.[12] Contemporary studies associate self-dehumanization with reduced psychological resilience and moral trauma, highlighting its complex negative consequences for both the

clinician mental health and the safety of patients.[13]

Empathy fatigue, often characterized as the accumulating emotional weight of caregiving, manifests when continuous contact with the trauma of others exhausts a professional's ability to empathize.[14] Within the nursing context, this phenomenon engages in a dynamic interplay with burnout, serving as a critical mediator that links emotional depletion to the development of depersonalization.[15] Research has steadily highlighted gender-specific variations: female nurses tend to show elevated levels of emotional exhaustion driven by societal role pressures and emotional work, while their male counterparts are more prone to higher rates of depersonalization and self-dehumanization, indicative of distinct gender-based adaptive strategies.[16] Furthermore, empathy fatigue can act as an antecedent to self-dehumanization, a state where the professional starts to undergo emotional numbing as a defensive psychological shield. These observations highlight the critical need for burnout prevention strategies that are tailored to address gender-specific needs.

The COVID-19 health crisis significantly amplified the mental strain placed on medical professionals. Specifically, nurses working in intensive care and high-dependency settings were forced to confront a continuous cycle of mortality, the danger of viral transmission, and profound social seclusion.[17] Within the Greek healthcare framework, the pandemic unveiled deep-seated structural flaws, including severe personnel deficits, the absence of mental health resources, and extended periods of emergency duty.[18,19] This intense environment did more than merely heighten emotional fatigue; it also hastened the development of dehumanization. Nursing staff frequently described experiences of feeling unseen, treated as objects, and sensing an internal erosion of their own human nature.[20] As a result, research emerging after the pandemic indicates a lasting shift in professional identity among nurses, marked by reduced empathetic capacity and a growing tendency to view oneself as a machine. The relationship between burnout, dehumanization, and empathy fatigue can be visualized as an evolving psychosocial spectrum. Long-term workplace stress leads to emotional depletion, which in turn activates dehumanization. When this detachment persists, it progresses into self-dehumanization, ultimately compromising both empathy and job satisfaction.

This approach synthesizes established psychosocial theories of burnout with growing scholarship on dehumanization, highlighting the cyclical pattern of emotional detachment and the critical requirement for systemic institutional support.

Understanding the dynamic relationship between burnout and (self-)dehumanization provides a theoretical basis for interventions aimed at rebuilding empathy and professional purpose. Specifically for nurses within Greek ICUs, this perspective emphasizes the necessity for structural reforms, peer-assistance networks, and resilience-oriented training initiatives. By anchoring this investigation at Evangelismos General Hospital—an environment characterized by extreme pressure and high acuity—the study enriches the global dialogue regarding healthcare worker welfare and stresses the ethical obligation to safeguard the psychological integrity of nursing staff.[21]

Methods

The aim of this cross-sectional study was to investigate the prevalence of professional burnout and its association with the demographic characteristics of the sample. Additionally, the study examined the levels of dehumanization and self-dehumanization among nurses and explored the relationship between these constructs and burnout in ICUs of the General Hospital "Evangelismos".

The study targeted the entire nursing staff of ICUs at the General Hospital "Evangelismos." No formal power analysis was conducted a priori; instead, a total population sampling strategy was

employed, targeting all eligible nurses in the specific high-acuity units. The ICUs included the Cardiac Infarction Unit (n=25), the Cardiothoracic Post-Anesthesia Care Unit (n=24), ICU-4 (n=37), and ICU-3 (n=20). A total of 78 completed questionnaires were collected from 106 eligible staff members.

Participants were included if they were nurses or nurse assistants, employed for at least six months in the respective unit, and fluent in Greek as their native language. This minimum tenure was established to ensure that participants had sufficient exposure to the chronic stressors of the ICU environment, thereby allowing for the potential development of burnout symptoms, rather than reflecting the acute adjustment stress typically experienced by new hires during their orientation phase. Staff members from other allied health professions (e.g., occupational therapists, speech therapists) were excluded. Additionally, six participants were excluded due to incomplete questionnaire responses or employment duration of less than six months.

The study employed a structured questionnaire to assess burnout, dehumanization, and self-dehumanization among nurses in the ICUs of the General Hospital "Evangelismos." The questionnaire consisted of 39 items rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree) and was divided into three sections:

- Section A: Dehumanization of patients
- Section B: Self-dehumanization of nurses
- Section C: Levels of professional burnout

The instruments used were based on the Oldenburg Burnout Inventory and the Dehumanization and Mechanistic Self-Dehumanization scales, with permission for use obtained from the respective authors. These tools were selected due to their relevance to the study context and prior validation in related research conducted by the University of Crete. Specifically, the original validation study demonstrated robust psychometric properties, including high internal consistency and construct validity, establishing the scales as reliable instruments for assessing dehumanization in healthcare settings.

The study adhered to ethical principles and research integrity guidelines. All participants were fully informed about the study purpose and procedures. Anonymity was guaranteed, and data collection was strictly for research purposes. Participation was voluntary, and withdrawal was allowed at any stage without consequence.

Data were analyzed using R software (version 4.1.1). Non-parametric statistical methods were applied because psychological scale scores did not follow a normal distribution:

- Mann–Whitney U test for comparisons of two independent groups (e.g., male vs. female).
- Kruskal–Wallis H test for comparisons of more than two independent groups (e.g., age groups, shifts).
- Spearman's rank correlation coefficient (ϱ) to assess associations between quantitative variables (e.g., years of experience, working hours).

A significance level of $\alpha = 0.05$ was used for all analyses.

Before analysis, questionnaire responses were aggregated into total scores for each subscale:

Burnout Questionnaire (Oldenburg Burnout Inventory)

Exhaustion: Sum of items C2, 4, 5, 8, 10, 12, 14, 16; higher scores indicate higher physical and emotional exhaustion.

Disengagement: Sum of items C1, 3, 6, 7, 9, 11, 13, 15; higher scores indicate greater disengagement and dissatisfaction with work.

- Burnout Severity: Low: ≤43, Moderate: 44–51, High: ≥52

Dehumanization Questionnaire

- Animalistic Dehumanization: Sum of items A1–A6

- Mechanistic Dehumanization: Sum of items A7–A12

Higher scores indicate greater dehumanization, as no standardized cut-offs exist.

Self-Dehumanization Questionnaire

- Scores were calculated from Section B items. Higher scores indicate greater levels of self-dehumanization, without standardized cut-offs.

In the present study, the internal consistency of the employed scales was satisfactory, with Cronbach's alpha coefficients of α = 0.85 for the Oldenburg Burnout Inventory, α = 0.82 for the Dehumanization Scale, and α = 0.89 for the Self-Dehumanization Scale.

Results

The sample consisted of 78 nurses, predominantly female, with an age range mostly between 25 and 45 years. The majority had between 5 and 15 years of professional experience, with educational levels varying from undergraduate degrees to higher qualifications. These demographic characteristics provide context for interpreting burnout and dehumanization scores, indicating that the participants represent a relatively experienced and professionally diverse nursing population. The sample comprised 78 nurses, predominantly female (67.9%), with professional profiles detailed in Table 1. The sample consisted of 78 nurses, predominantly female, with a professional profile.

Table 1. Demographic and occupational characteristics

Characteristic	Category	N	%
Gender	Male	25	32.1%
	Female	53	67.9%
	Other	0	0.0%
Age (years)	≤ 29	13	16.7%
	30–39	22	28.2%
	40–49	24	30.8%
	≥ 50	19	24.4%
Education	Secondary	4	5.1%
	Technical/Vocational	11	14.1%
	University	18	23.1%
	Postgraduate	45	57.7%
Work experience (years)	1–2	6	7.7%
	3–5	22	28.2%
	6–10	10	12.8%
	11–20	19	24.4%
	>20	21	26.9%
Employment contract	Permanent	56	71.8%
	Fixed-term	22	28.2%
Work shifts (per month)	Morning only	13	16.7%
	1–4 shifts	28	35.9%
	5–8 shifts	22	28.2%
	>8 shifts	15	19.2%
Marital status	Single	50	64.1%
	Divorced	9	11.5%
	Married	19	24.4%
Children	0	53	67.9%
	1	9	11.5%
	2	16	20.5%
Household members	0	26	33.3%
	1	23	29.5%
	2	11	14.1%
	3	16	20.5%
	4	2	2.6%

Descriptive statistics for the burnout subscales revealed that nurses reported high levels of emotional exhaustion (mean ± SD), suggesting significant psychological and physical fatigue

Dehumanization scores were moderate, indicating that while some distancing from work tasks was present, it was not extreme. Detailed

responses regarding the dehumanization of patients, reflecting moderate depersonalization levels, are presented in Table 2.

The detailed distribution of responses for the professional burnout items is illustrated in Table 3.

The statistical significance of these associations between burnout and demographic or occupational characteristics is detailed in Table 4.

Table 2: Results of Questionnaire A Responses (Dehumanization)

Question	Score 1 (N)	Score 1 (%)	Score 2 (N)	Score 2 (%)	Score 3 (N)
They are superficial individuals and lack depth	23	29.5%	19	24.4%	6
They are open-minded individuals who can think clearly	2	2.6%	2	2.6%	17	0.97	<0.001* (0.75-1.17)
They are cold individuals who behave as if they were robots/machines	9	11.5%	15	19.2%	15	1.67	<0.001* (1.38-1.94)
They are individuals who feel warmth in their relationships with others	0	0.0%	7	9.0%	18	0.84	<0.001* (0.63-1.26)
They behave as if they themselves were objects rather than human beings	22	28.2%	15	19.2%	17	0.90	<0.001* (0.74-1.05)
They are emotional individuals who show responsiveness and warmth	0	0.0%	6	7.7%	24	0.68	0.403 (-0.09-0.23)
They are rational and sensible individuals. They are intelligent	2	2.6%	3	3.8%	15	0.46	<0.001* (0.66-0.27)
They are inferior to the human species, like animals	52	66.7%	18	23.1%	2	**5.20**	**<0.001* (4.72-5.67)**

* At the significance level of 0.05

Table 3: Results of Questionnaire C Responses (Burnout)

Question	Score 1 (N)	Score 1 (%)	Score 2 (N)
I understand my patients	15	19.2%	27
I manage to achieve my goals with my patients	54	69.2%	18
I am confident that I can build a positive relationship with my patients	28	35.9%	26
I feel energetic at work	48	61.5%	24
I can understand how my patients feel about various things	22	28.2%	29
I can calmly handle problems that arise at work	13	16.7%	32

Table 4: Correlation between Total Burnout Score and Various Demographic and Occupational Characteristics

Variable	Test Used	Statistic	p-value
Gender	Mann-Whitney U Test	W = 671.5	0.927
Age	Kruskal-Wallis Test	$\chi^2 = 2.94$	0.402
Education	Kruskal-Wallis Test	$\chi^2 = 8.53$	0.0363
Years of Service	Kruskal-Wallis Test	$\chi^2 = 7.81$	0.099
Contract Type	Kruskal-Wallis Test	$\chi^2 = 5.27$	0.0217
Shifts	Kruskal-Wallis Test	$\chi^2 = 6.62$	0.0852

Overall, the results indicate a significant interplay between burnout, patient dehumanization, and self-dehumanization. Emotional exhaustion appears to be the most affected dimension of burnout, strongly linked to both forms of dehumanization. Depersonalization shows moderate associations, reflecting psychological distancing strategies. Both patient dehumanization and self-dehumanization may function as coping mechanisms under high work-related stress, yet they are simultaneously associated with higher burnout, highlighting a potentially maladaptive pattern among nursing staff.

Further analysis of the data revealed significant correlations between the variables under study. Specifically, Figure 1 reveals a significant negative correlation between self-dehumanization and burnout scores ($R = -0.54$, $p < 0.001$), suggesting that nurses who adopt a mechanistic view of themselves may report lower levels of exhaustion. This linear regression clearly shows the significant negative correlation between Self-Dehumanization and Total Burnout scores.

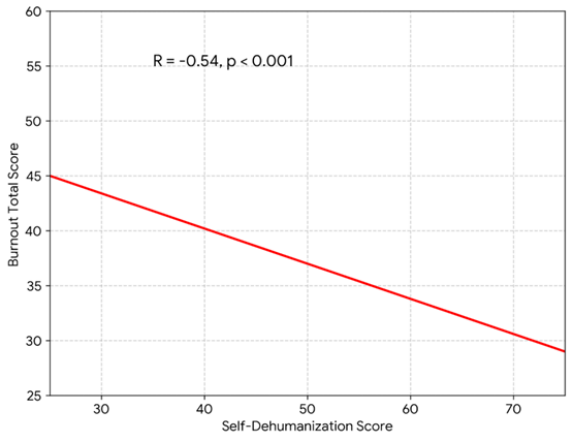

Figure 1. Linear regression showing the significant negative correlation between Self-Dehumanization and Total Burnout scores

Conversely, Figure 2 illustrates the correlation between patient dehumanization and burnout. This figure depicts the relationship between the Total Scores of the Dehumanization Questionnaire and Professional Burnout among the participating nursing staff.

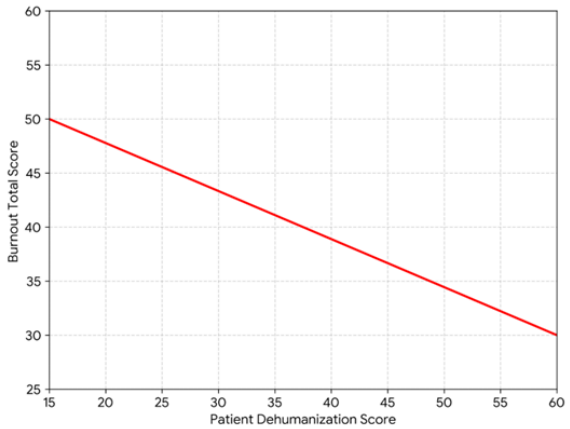

Figure 2. Correlation between Total Scores of the Dehumanization Questionnaire and Professional Burnout

Finally, as presented in Figure 3, correlation analysis revealed a significant positive association between patient dehumanization scores and self-dehumanization scores. This finding indicates that the tendency to objectify patients is closely linked to the process of objectifying oneself within the clinical setting.

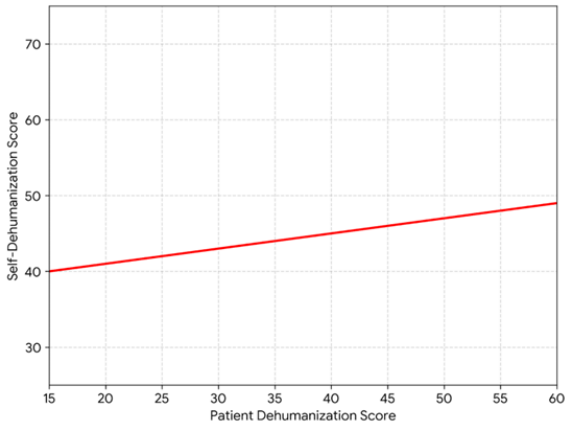

Figure 3. Association between Patient Dehumanization Score and Self-Dehumanization Score.

Discussion

The majority of the study cohort (76.9%) demonstrated low burnout scores. Conversely, elevated burnout levels, affecting 7.7% of the sample, were predominantly observed among participants with lower educational attainment, permanent employment status, parenthood (specifically one or two children), and a schedule with fewer working hours.

With respect to the correlation between academic background and occupational burnout, these results align with findings from a study involving 250 nurses across three hospitals in Shandong, China. That research confirmed that personnel holding a single degree experienced greater burnout, a trend attributed to performing less fulfilling duties than their more highly qualified colleagues. Furthermore, disparities were noted regarding secondary education, where university undergraduates exhibited the lowest burnout rates.[22]

In terms of working hours, evidence from two medium-sized medical facilities in Caceres, Spain, supports the observation that staff working 30-hour weeks reported intensified exhaustion compared to those on 40-hour schedules. However, this paradox warrants further investigation; a separate analysis of Finnish social and health systems suggests that nurses with reduced hours often seek supplementary employment to ensure economic viability and family welfare, resulting in total work overload and eventual occupational burnout.[23] This observation is particularly relevant in contexts of economic instability, where job precariousness compels professionals to view reduced hours not as an opportunity for rest, but as a financial deficit. This specific socioeconomic landscape distinguishes the present findings from studies in Asian contexts, such as Indonesia. While both regions face high demands, the Greek experience is uniquely shaped by the psychological impact of prolonged austerity and the loss of previously established resource levels, rather than by the challenges of rapid health system expansion. Consequently, the correlation between fewer hours and higher burnout likely reflects anxiety about income insecurity and the hidden, cumulative fatigue from engaging in secondary employment to maintain family well-being.

Regarding the relationship between contract type and burnout severity, research involving 651 nursing staff across 79 psychiatric units found that those with permanent tenure were slightly more prone to burnout and more inclined to leave the profession.[24] Conversely, conflicting evidence exists; for instance, a study focusing on registered nurses in three rural Spanish regions found that temporary staff—often characterized by younger age, less experience, or lower educational qualifications—

demonstrated elevated levels of occupational burnout, depersonalization, and personal accomplishment, likely exacerbated by employment instability.[25] Furthermore, an investigation involving 676 public hospital nurses in Spain revealed that parenthood was linked to higher reported levels of personal fulfillment and professional achievement compared to childless peers.[26]

The findings of the current research highlight a distinct gender disparity in dehumanization tendencies, with male nurses exhibiting significantly higher scores in both animalistic and mechanistic forms. A similar pattern emerged for self-dehumanization, with men again scoring higher than women. Additionally, an advanced educational background appears to be linked to increased mechanistic dehumanization, whereas mid-career experience (6–10 years) appears to offer a protective effect compared with those with 11–20 years of service. A strong positive correlation was also identified between working hours and mechanistic dehumanization, suggesting that as working hours increase, so does the tendency to dehumanize.

These observations align with a 2022 survey of 1,150 Greek healthcare workers, which found higher self-dehumanization among males than females, although hetero-dehumanization levels did not differ significantly by gender. That study also corroborated our finding that prolonged working hours and rotating shift patterns (as opposed to fixed shifts) are positively associated with mechanistic dehumanization.[27] This gendered disparity likely reflects deeply ingrained societal expectations regarding masculinity, particularly the ideal of stoicism, which discourages the overt expression of vulnerability. Consequently, male nurses may be more prone to adopting a mechanistic self-perception as a socially sanctioned coping mechanism, suppressing emotional distress to conform to traditional norms of resilience and professional detachment.

Concerning gender-specific manifestations of occupational burnout, existing literature indicates that female professionals predominantly experience emotional exhaustion, whereas their male counterparts are more likely to manifest distress through dehumanization.[28]

Regarding work-related exhaustion, prevalence was highest among males with 3 to 10 years of tenure. Conversely, rates were minimal for those with fewer than 3 years of experience and plateaued among those with more than a decade of service, likely attributable to accumulated experience. Analyzing shift patterns revealed that morning rotations were most strongly associated with exhaustion, whereas the category of eight shifts was associated with the lowest scores. Furthermore, disengagement was found to be statistically associated with holding permanent employment contracts and working fewer hours.

It is well-established that heavy workloads escalate stress and erode professional satisfaction within nursing, subsequently driving emotional exhaustion—a symptom particularly prevalent among married female nurses as a primary manifestation of burnout. While women are often viewed as the archetypal caregivers, they frequently encounter workplace discrimination and diminished professional confidence. In contrast, men often occupy positions of authority yet face intense pressure and ambitious expectations, which predisposes them to a distinct form of burnout characterized by dehumanization.[29]

A separate investigation undertaken across three private medical centers in Los Angeles revealed that 87 nurses, representing 24% of the cohort, had reached the stage of burnout, with a mean professional tenure of 9.86 years (SD = 6.59). The data indicated a sharp rise in burnout prevalence, from a mere 4% among those with less than 6 months of experience to a peak of 60% among veterans with 25 to 30 years of service. It appears that prolonged career engagement may precipitate a conflict between personal identity and professional role. Accumulating

dissatisfaction and difficult working environments often breed apathy; simultaneously, as the healthcare landscape evolves and turnover occurs, remaining senior staff are gradually superseded by younger recruits driven to maximize their performance.[30] The current study demonstrates a clear correlation: the more nurses tend to objectify their patients, the higher their susceptibility to self-dehumanization. Frequently, this process functions as a defensive shield, enabling caregivers to evade the psychological trauma and emotional toll inherent in alleviating human suffering. Consequently, clinicians may utilize the dehumanization of others as a strategic tool for emotional regulation to forestall exhaustion.

Conversely, becoming conscious of this behavior—a phenomenon known as meta-dehumanization—can trigger severe psychological repercussions, including shame, anger, sorrow, and ethical dissonance. This internal conflict destabilizes self-esteem and self-perception, eventually culminating in self-dehumanization. Indeed, evidence indicates that self-dehumanization is linked to social withdrawal and self-destructive behaviors.[31] Ultimately, perceiving employees as objects within the healthcare system may be associated with a higher tendency for professionals to adopt self-dehumanization strategies, as they struggle to maintain efficiency amidst intense pressure.

The present analysis identified a statistically significant inverse relationship between self-dehumanization and occupational burnout. This negative correlation is supported by independent research conducted on a cohort of 96 nurses in Krakow, Poland; that study established that nursing staff who adopted dehumanizing attitudes towards patients were more successful in managing occupational stress and burnout syndrome compared to colleagues who did not employ such behavioral strategies.[32] Beyond the statistical correlations, these findings reveal a profound human struggle within the ICU environment. The transition from burnout to self-dehumanization should not be viewed merely as a clinical symptom, but rather as a desperate unconscious survival strategy—a 'regulatory shield' adopted by nurses to withstand the relentless emotional trauma and accumulated 'emotional residue' of their daily practice. Consequently, this research provides an innovative viewpoint that extends beyond conventional burnout paradigms, identifying self-dehumanization as a critical, distinct dimension of occupational distress. While perceiving oneself as a mechanistic instrument of care may offer temporary respite from overwhelming psychological pain, it comes at a steep moral cost, gradually eroding the empathy that defines the nursing profession. This emotional severance effectively dismantles the therapeutic relationship; by shielding themselves from pain, nurses inadvertently withdraw the compassion required for healing, reducing the patient to a biological object and violating the ethical core of care. Consequently, effectively supporting the nursing community requires interventions that go beyond operational staffing; it demands creating psychological safety nets that allow nurses to process trauma without forfeiting their humanity.

Nonetheless, these defensive behaviors elicit detrimental reactions from care recipients, often resulting in treatment non-compliance, clinical relapse, and the induction of self-dehumanization within the patients themselves. Ultimately, while dehumanization and self-dehumanization may seemingly offer a functional method for regulating emotions, anxiety, and burnout, a wealth of evidence connects these processes to self-destructive behaviors, profound risks to mental well-being, and significant degradation in the quality of nursing practice and the integrity of the therapeutic relationship. To mitigate these maladaptive responses, institutions such as 'Evangelismos' General Hospital must prioritize the implementation of targeted preventive interventions. Specifically, establishing structured peer-support systems, such as Schwartz Rounds, can provide a psychologically

safe space for staff to process the 'emotional residue' of their work without judgment. Furthermore, integrating resilience training programs that focus on mindfulness and cognitive reframing is essential to equip nurses with healthier coping strategies than dehumanization. Ultimately, these clinical interventions must be supported by organizational commitment to adequate staffing and optimized shift rotations, ensuring that the emotional safety of the workforce serves as the foundation for sustainable, patient-centered care.

From an Occupational Health and Safety (OHS) perspective, mitigating self-dehumanization requires systemic administrative action rather than solely individual resilience. Specifically, hospital administrations should implement ergonomic rotation schedules that limit prolonged exposure to high-intensity trauma. Furthermore, targeted psychological counseling programs that emphasize empathy reconstruction should be integrated into standard occupational health protocols to ensure a safer, more sustainable work environment.

Limitation

The present study has certain limitations that must be acknowledged. First, the sample size (N=78), although representative of the specific high-acuity units examined within "Evangelismos" General Hospital, is relatively small and derived from a single tertiary institution. Furthermore, given the absence of a power analysis, this research should be interpreted as an exploratory study. This may limit the generalizability of the findings to the broader nursing population in different healthcare settings or geographical regions. Second, the cross-sectional design allows for the identification of associations but precludes the establishment of causal relationships between burnout, dehumanization, and sociodemographic factors. Finally, the use of self-reported questionnaires may introduce response bias, as participants might underreport socially undesirable attitudes such as dehumanization. Future longitudinal studies with larger, multi-center samples are recommended to further validate these findings.

farming activities, ensuring that ergonomic concerns are addressed systematically.[19-21]

The profound psychological toll and the adoption of self-dehumanization as a "regulatory shield" observed in our study align with broader systemic challenges within the Greek healthcare framework. Recent literature corroborates that severe occupational burnout is highly prevalent among Greek healthcare professionals across both public and private sectors, largely driven by chronic understaffing, intense workloads, and insufficient resources.[33] Furthermore, the manifestation of such extreme coping mechanisms underscores a fundamental deficit in the organizational safety culture. As recently highlighted, a compromised workplace safety climate in Greek public hospitals significantly exacerbates the psychological distress of healthcare workers, forcing staff to rely on maladaptive emotional detachment strategies when institutional support is inherently lacking.[34]

Addressing this moral imperative requires transitioning from individual-level coping strategies to systemic organizational reform. To successfully dismantle the pressures that compel nurses to sacrifice their humanity, healthcare organizations must implement structured monitoring of psychosocial hazards. The integration of Key Performance Indicators (KPIs) tailored to hospital occupational health and safety has been shown to be an essential strategy for mitigating workplace stressors and evaluating the effectiveness of health interventions.[35] By systematically tracking burnout and emotional well-being as core KPIs, institutions can foster therapeutic environments that sustain professional resilience, ensuring that the psychological safety of the nursing workforce is prioritized alongside patient care.[36]

Conclusion

The complex dynamics between burnout and dehumanization revealed in this study point to a profound crisis in critical care nursing. While further investigation is needed to fully map the consequences of these behaviors on patient outcomes and professional relationships, the core message is clear. Our findings underscore a critical moral imperative for healthcare organizations: to dismantle the systemic pressures that compel nurses to sacrifice their humanity as a psychological defense, and to transition instead toward therapeutic environments that sustain both professional resilience and the capacity for compassionate care.

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