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Original Research Article

Burnout among Healthcare Workers in a Private Setting in Thailand

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ABSTRACT

Background: Burnout syndrome, characterized by emotional exhaustion due to work-related stress, can lead to adverse mental health outcomes such as depression.

Objective: This study aimed to examine the prevalence and associated factors of burnout among healthcare workers in private hospitals.

Method: A cross-sectional descriptive study was conducted among healthcare workers at a private hospital in Bangkok. Of the 540 eligible participants, 500 returned completed questionnaires (N = 500). Burnout was assessed using the Maslach Burnout Inventory, along with measures of job satisfaction, work-related factors, and stress levels. Data were analyzed using independent t-tests and logistic regression to identify significant predictors of burnout.

Results: Most participants were female (81%) and aged 20–29 years (64.8%), with over half (52.6%) working as nurses or nurse-aides. Moderate to high stress was reported in 87.4% of participants. Although the majority showed low emotional exhaustion (87.4%) and depersonalization (98.8%), 72.2% reported moderate to high personal accomplishment. Key factors significantly associated with moderate to high burnout included high stress levels, outpatient department work, close patient interactions, limited rest, alcohol use, and short sleep duration (≤6 hours/night) ($p < 0.05$). Logistic regression confirmed outpatient work, limited rest, alcohol use, close patient contact, and insufficient sleep as significant predictors.

Conclusion: While most private hospital workers experienced low to moderate burnout, high stress was prevalent. Work environment factors, limited recovery time, and lifestyle behaviors such as alcohol use and short sleep duration may contribute to elevated burnout levels. These findings suggest the need for targeted interventions addressing both organizational and behavioral factors to reduce burnout and improve the well-being of healthcare professionals.

Introduction

Burnout syndrome is a state of emotional exhaustion resulting from prolonged and unmanaged work-related stress. Individuals experiencing burnout often feel overwhelmed, emotionally detached from their work, and less effective in fulfilling job demands (Freudenberger, 1974). The *World Health Organization (WHO)* classifies burnout as an occupational phenomenon in the *International Classification of Diseases, 11th Revision (ICD-11)*, defined by three dimensions: (1) feelings of energy depletion or exhaustion, (2) increased mental distance from one's job or feelings of negativism or cynicism related to one's job, and (3) reduced professional efficacy (World Health Organization [WHO], 2019; WHO, 2022). Burnout typically progresses from exhaustion to depersonalization and then to a diminished sense of accomplishment, and may eventually lead to mental health issues such as depression (Maslach, et al., 2001).

Numerous studies have shown that healthcare professionals are particularly vulnerable to burnout. A meta-analysis of 182 studies across 45 countries found the prevalence of burnout in healthcare workers ranged widely, from 0% to 80.5% (Sirorat, 2021). In Thailand, a 2019 survey by the *College of Management, Mahidol University* reported that 73% of private-sector employees were either experiencing burnout or at high risk (Sumalai, 2021). Among healthcare workers, the situation has become more pressing due to factors such as long working hours, emotional demands of patient care, and increased pressure from the COVID-19 pandemic. These demands are often amplified in private hospitals, where competitiveness and expectations for high service standards may intensify stress (Chatchaikulsiri, 2021; Chun-ngam, 2020; Jalili, et al., 2021).

While burnout among healthcare workers has been well studied globally, there remains a lack of focused research on its prevalence and associated factors in private hospital settings in Thailand. Most existing studies emphasize public sector institutions or international contexts, which may differ significantly in work environment and organizational pressures. Furthermore, few studies have examined how specific factors such as workload, shift work, commuting time, or personal health behaviors influence burnout in this local context.

Therefore, this study aims to address this gap by examining the prevalence of burnout and its associated factors among healthcare workers in a private hospital in Bangkok. Understanding these relationships is essential for informing targeted interventions that can support healthcare workers' well-being and ultimately improve the quality of care delivered to patients.

Literature Review and Theoretical Framework

1. The conceptual understanding of burnout syndrome is primarily grounded in the Maslach Burnout Model. This model, developed by Christina Maslach and colleagues (Maslach, et al.,1981), which comprises three core dimensions:

- Emotional exhaustion: feelings of being emotionally overextended and depleted
- Depersonalization: negative, detached, or cynical attitudes toward patients or clients
- Reduced personal accomplishment: a sense of inefficacy and decreased productivity

Additionally, the World Health Organization (WHO, 2019) classifies burnout as an occupational phenomenon in the ICD-11. It is characterized as a syndrome resulting from chronic workplace stress not successfully managed, aligning with the transactional model of stress, which emphasizes individual appraisal of stressors and coping mechanisms.

2. Personal Factors

Although organizational factors play a dominant role, individual characteristics such as personality type, coping style, and resilience can influence susceptibility to burnout. However, these personal factors tend to act more as moderators rather than direct causes (Shanafelt, et al., 2015).

3. Job-Related Factors

Numerous studies have identified job-related stressors as primary contributors to burnout. These include:

- High workload and time pressure
- Lack of autonomy or control over work
- Poor leadership and lack of organizational support
- Insufficient work-life balance and unclear job roles

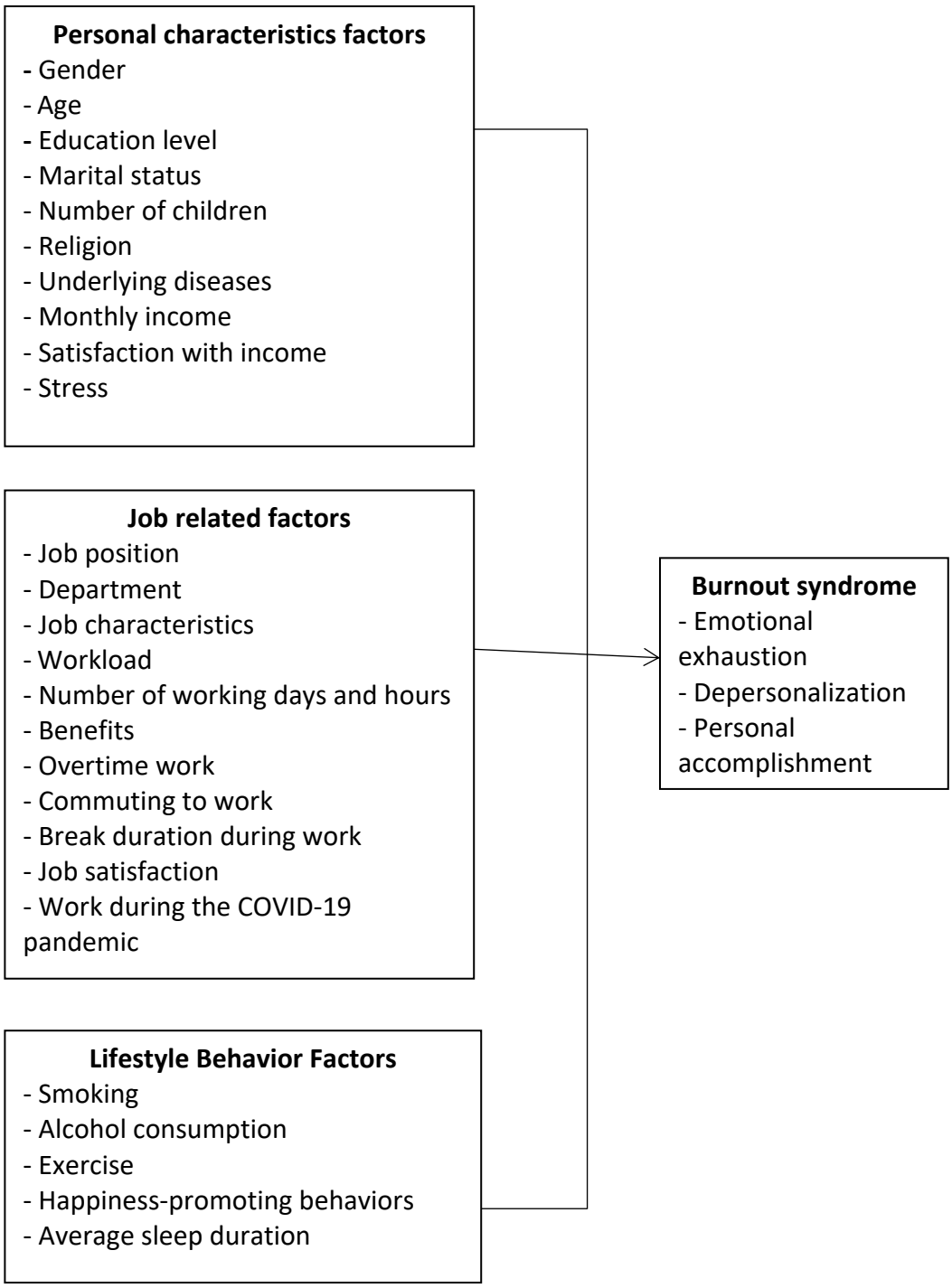
Organizational culture, teamwork, and perceived fairness also strongly influence burnout levels (Aronsson, et al., 2017).

4. Lifestyle and Behavioral Factors

Emerging evidence suggests that health behaviors—such as sleep quality, substance use (e.g., alcohol), and inadequate rest—can exacerbate the effects of workplace stress. These lifestyle choices, especially under chronic stress, may contribute to faster emotional depletion and lower resilience, indirectly increasing burnout risk (Jalili et al., 2021)

Together, these theories and models offer a comprehensive lens through which to understand burnout in healthcare settings, particularly in high-pressure environments such as private hospitals where performance, efficiency, and client satisfaction are constantly emphasized.

Theoretical Framework



Objectives

This study aims to investigate burnout among healthcare workers in private hospitals through the following specific objectives:

1. To determine the prevalence of burnout among healthcare workers in a private hospital setting.

2. To identify the personal, job-related, and lifestyle factors associated with burnout among healthcare workers in a private hospital setting.

Research Methodology

1. Study design and setting

This research is a cross-sectional descriptive study. Data collection took place between August 10, 2023, and January 15, 2024.

2. Participants

The participants were all healthcare workers in a private hospital in Bangkok, Thailand, who had worked there for at least 3 months and were willing to give the written consent to participate in the research. All eligible participants were given a code to anonymize their identity and were asked to complete online questionnaires. Out of 540 eligible individuals, 500 subjects provided consent and completed the questionnaire.

3. Data collection

Participants were contacted individually in person and invited to participate in the study. The data were collected using an online questionnaire created with Google Forms. The instruments used in this study included self-rated questionnaires covering personal, work-related, and lifestyle information, along with the Suanprung Stress Test-20 (Suwat, et al., 1998) this 20-item scale assesses perceived stress across emotional, physical, and behavioral symptoms. It has been widely validated in Thai populations. In the present study, the Cronbach's alpha coefficient was 0.88, indicating good internal consistency.

The Job Satisfaction Questionnaire (Kitsanguan, 2011; Tsai, et al., 2007), which measures job satisfaction among nurse specialists, consists of four domains: professionalism, interpersonal relationships with colleagues, compensation, and self-efficacy. This instrument, developed by Tsai et al. (2007) and adapted for Thai healthcare settings by Kitsanguan (2011), includes 20 items scored on a 5-point Likert scale. Cronbach's alpha for the current study was 0.84.

A Thai version of the Maslach Burnout Inventory (Edú-Valsania, et al., 2022; Sammarwaja, 1991) was used to assess burnout syndrome, focusing on three domains: emotional exhaustion, depersonalization, and personal accomplishment. The inventory consists of 22 items rated on a 7-point Likert scale from 0 (never) to 6 (every day). The reliability of each domain was confirmed by Cronbach's alpha coefficients of 0.92, 0.66, and 0.65, respectively. Each domain was analyzed separately in accordance with established guidelines. Emotional exhaustion and depersonalization scores were interpreted such that higher scores indicate greater burnout, while for personal accomplishment, lower scores indicate higher burnout. Specifically, the cut-off scores used to classify burnout levels were as follows: (1) Emotional Exhaustion: High burnout ≥ 27, Moderate burnout 17–26, Low burnout ≤ 16; (2) Depersonalization: High burnout ≥ 13, Moderate burnout 7–12, Low burnout ≤ 6; (3) Personal Accomplishment: High burnout ≤ 31,

Moderate burnout 32–38, Low burnout ≥ 39. These cut-off points follow the standards used in previous Thai studies and international research (Maslach, et al., 1981; Sammarwaja, 1991).

4. Data Analysis

All data were analyzed using SPSS version 22. Personal and demographic data, work-related and lifestyle information, stress levels, and job satisfaction were used as independent variables, while burnout level was the dependent variable. Descriptive statistics were used to analyze all variables. The relationship between the independent variables and burnout level were analyzed using Chi-square and Fisher's exact test. Binary logistic regression analysis was performed to identify the predictive factors for moderate to high levels of burnout. The statistical significance was set at a level of less than 0.05 ($p < 0.05$).

Results

The findings presented in Table 1 indicate that 81% of the respondents were female, with the largest age group being 20 to 29 years old (64.8%). Half of the participants were nurses and nurse-aides, making up 42.8% and 9.8 %, respectively. Physicians accounted for only 9.2% of participants. A significant majority, 82.4%, held a bachelor's degree, while only 17.6% were married. The most common monthly income range was between 30,001 to 40,000 THB, representing 26.0% of the participants. Regarding stress levels, 83.8% and 12.6 % of respondents reported experiencing moderate and low levels of stress, respectively. Only 3.6 % of them experienced a high level of stress.

Table 1. Personal characteristics and job-related factors of the participants

Personal characteristics factors	**All N (%)**	**Moderate to high level of burnout (n=220)**	**Low level of burnout (n=280)**	**x^2**	**P Value**
		N (%)	**N (%)**		
Female	405 (81)	172 (78.20)	233 (83.21)	2.412	0.154
Age (30.562±5.950) > 30 years	228 (45.6)	97 (44.10)	131 (46.78)	0.361	0.548
Bachelor's Degree or Higher	412 (82.4)	186 (84.55)	226 (80.71)	1.247	0.264
Married	88 (17.6)	40 (18.18)	48 (17.14)	0.092	0.762
Monthly Income (43,281±28,302.41) ≤ 40,000 Baht	321(64.2)	142 (64.55)	179 (63.93)	0.020	0.886
No Savings	97 (19.4)	42 (19.10)	55 (19.64)	0.024	0.877
Stress Level Moderate to Severe Low	437 (87.4)	198 (90)	239 (85.36)	2.412	0.012*

	63 (12.6)	22 (10)	41 (14.64)		
Job related factors					
Department Outpatient Inpatient	 325 (65) 175 (35)	 156 (70.91) 64 (29.09)	 169 (60.36) 111 (39.64)	6.030	0.014*
Welfare Insufficient Sufficient	 30 (6) 470 (94)	 19 (8.64) 201 (91.36)	 11 (3.93) 269 (96.07)	4.841	0.028*
High Workload	360 (72)	169 (76.82)	191 (68.21)	4.524	0.033*
Working Overtime	49 (9.8)	23 (10.45)	26 (9.29)	0.190	0.190
Rest Time Inadequate Adequate	 11 (2.2) 489 (97.8)	 10 (4.55) 210 (95.45)	 1 (0.36) 279 (99.64)	10.044	0.002**
Average Commute Time to Work < 30 minutes ≥ 30 minutes	 346 (69.2) 154 (30.8)	 142 (64.55) 78 (35.45)	 204 (72.86) 76 (27.14)	3.993	0.046*
Close patient interactions	445 (89)	206 (93.64)	239 (85.36)	8.626	0.003*
Close Contact with COVID-19 Patients	214 (42.8)	103 (46.82)	111 (39.64)	2.591	0.107
Facing Difficulty in Work during COVID-19 Pandemic.	68 (13.6)	38 (17.27)	30 (10.71)	4.510	0.034*
Job satisfaction					
Low to Moderate Level of Satisfaction with Profession	60 (12)	20 (9.09)	40 (14.29	3.148	0.076
Low to Moderate Level of Satisfaction with Interpersonal Relationships with Colleagues	49 (9.8)	16 (7.27)	33 (11.79)	2.839	0.092
Low to Moderate Level of Self-efficacy	66 (13.2)	28 (12.73)	38 (13.57)	0.077	0.782
Low to Moderate Level of Satisfaction with Compensation	359 (71.8)	162 (73.64)	197 (70.36)	0.654	0.419
Lifestyle Behavior					
Currently Smoking	20 (4.2)	7 (3.18)	13 (4.64)	0.685	0.408
History of Alcohol Consumption	376 (75.2)	175 (79.55)	201 (71.79)	3.978	0.046*

Sleep Hours ≤ 6 hours Per Day	30 (6)	19 (8.64)	11 (3.93)	4.841	0.028*
Regularly Exercise	343 (68.6)	155 (70.45)	188 (67.14)	0.627	0.428

* Chi-square **Fisher's exact test; Significance (p < .05).

In terms of work, it was found that 72% of personnel reported having a high workload, and 89.2% occasionally worked overtime, while 9.8% frequently worked overtime. The vast majority, 97.8%, believed that they got enough rest. Concerning job characteristics, 89% of employees worked closely with patients. During the COVID-19 pandemic, 38.0% of participants reported moderate stress levels and 13.6% described facing difficulty at work. Most participants were satisfied with their job in terms of professionalism, interpersonal relationships, and work perception, but not reward or compensation.

Regarding lifestyle behaviors, 96% of the participants were non-smokers. Most participants (75%), drank alcohol occasionally, followed by 14.6% who had never drunk and 10.2% who had stopped drinking. In terms of physical activity, 58.8% of the participants exercised occasionally, 31.4% did not exercise at all, and 9.8% exercised regularly. Most respondents (94%), slept more than six hours per night.

Regarding burnout prevalence, most participants experienced low levels of emotional exhaustion and depersonalization. However, the personal accomplishment domain showed a more even distribution. It is important to note that, unlike the other two domains, *a lower score on personal accomplishment indicates higher burnout*, while a higher score indicates lower burnout. In this study, 36.8% of participants had moderate personal accomplishment (indicating moderate burnout), 35.4% had high personal accomplishment (indicating low burnout), and 27.8% had low personal accomplishment (indicating high burnout). The levels and scores of burnout subdomains for all participants are presented in Table 2.

Table 2. Level and burnout subdomain of the participants

Burnout subdomain	**All (mean±SD)**	**Moderate to high level of burnout**		**Low level of burnout**	
		(mean±SD)	**N (%)**	**(mean±SD)**	**N (%)**
Emotional exhaustion	10.32±5.39	20.88±3.92	63 (12.6)	8.83±3.65	437 (87.4)
Depersonalization	0.89±6.96	14.66±1.63	6 (1.2)	0.82±1.23	494 (98.8)
Personal accomplishment*	33.97±5.39	22.25±4.55	361 (72.2)	42.13±2.46	139 (27.8)

*Note: For personal accomplishment, *lower scores indicate higher burnout*, while higher scores indicate lower burnout.

The Univariate analysis using the Chi-square test as shown in Table 1 revealed that factors significantly associated with moderate to high level of burnout (p < 0.05), moderate to severe stress levels, working at outpatient department, high workload, inadequate rest time, a commute to work that exceeded 30 minutes, working closely with service recipients, Experiencing difficulty during COVID-19 pandemic, history of alcohol consumption and sleep ≤ 6 hours per night. The job satisfaction was not associated with the level of burnout.

Table 3. Pearson Correlation Coefficients among burnout, stress and, job satisfaction

Variables	Burnout	Stress	Job satisfaction
Burnout	1		
Stress	0.315**	1	
Job satisfaction	0.340**	0.088*	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The analysis in Table 3 reveals significant positive correlations between burnout and stress ($r = 0.315$, $p < .001$), burnout and job satisfaction ($r = 0.340$, $p < .001$), while stress was less correlated with job satisfaction ($r = 0.088$, $p = .050$). These findings suggest that both stress and job satisfaction are associated with burnout. However, binary logistic regression analysis revealed that personal or demographic factors, along with levels of stress and job satisfaction, did not predict moderate to high levels of burnout in these samples. But the work-related factors emerged as significant predictors of moderate to high burnout. Specifically, working in the outpatient department, close patient interactions, alcohol consumption and inadequate rest time were identified as key contributors. Employees in the outpatient department had 1.815 times the risk (95% CI 1.219-2.702) of experiencing burnout compared to those in the inpatient department. Those working closely with patients had 2.292 times the risk (95% CI 1.187-4.429) compared to individuals without close patient contact. Additionally, inadequate rest increased the risk of burnout by 9.456 times (95% CI 1.125-11.465) compared to those with adequate rest. Regarding lifestyle behavior factors, a history of alcohol consumption and an average sleep duration of six hours or less were identified as significant risk factors. Individuals who consumed alcohol had 1.595 (95% CI 1.023-2.488) times the risk of burnout compared to non-drinkers. Those with an average sleep duration of six hours or less hours had 2.493 times the risk (95% CI 1.082-5.745) of burnout compared to those with more than 6 hours of sleep, as presented in Table 4.

Table 4. Binary logistic regression analysis for factors predicted moderate to high level of burnout

Burnout Factor	B	S.E.	Exp(B)	95%CI		P-value
				Lower	Upper	
Outpatient department	0.596	0.203	1.815	1.219	2.702	0.003*
Close patient interactions	0.830	0.336	2.292	1.187	4.429	0.014*
Inadequate rest time	2.247	1.086	9.456	1.125	11.465	0.039*
History of alcohol consumption	0.467	0.227	1.595	1.023	2.488	0.039*
Average sleep duration per day ≤6 hours	0.914	0.426	2.493	1.082	5.745	0.032*

* Significance ($p < .05$).

Discussion

This study explored burnout among healthcare personnel working in a private hospital in Bangkok, focusing primarily on a predominantly young female workforce consisting mostly of nurses and nurse aides. Despite the high workload and considerable occupational stress these participants faced, the levels of emotional exhaustion and depersonalization reported were

relatively low, while personal accomplishment was notably high. These findings suggest a comparatively lower degree of burnout in this sample than has been documented in other studies, particularly those involving physicians who typically endure heavier workloads and more demanding job responsibilities, which often contribute to higher burnout levels. Such variation underscores the importance of professional roles and job characteristics in influencing burnout outcomes.

The results align with previous research from Ekaphol and colleagues, who documented low to moderate levels of emotional exhaustion and depersonalization among psychiatric nurses during the COVID-19 pandemic (Sudachom, et al., 2023). Similarly, the study on nurses in private hospitals in Northern India highlighted that moderate stress and burnout levels were common, with role-related stressors such as role overload and role insufficiency being significant predictors of burnout (Syed, et al., 2014). These findings collectively highlight the critical influence of organizational and environmental factors—such as workload, job control, and workplace support—on the development and manifestation of burnout symptoms. The Maslach Burnout Model further supports these associations by emphasizing the interplay between job demands and individual coping resources in burnout development (Maslach, et al.,1981; Maslach, et al., 2001).

The incongruity observed in this study—low emotional exhaustion and depersonalization paired with high personal accomplishment—is consistent with findings from other recent studies (Bu et al., 2024; Delafontaine et al., 2024). Bu and colleagues' network analysis of nurse burnout in Harbin, China, demonstrated a positive correlation between emotional exhaustion and depersonalization but no significant association with personal accomplishment, underscoring the multidimensional nature of burnout. Moreover, Malta et al.'s (2024) review suggested an inverse relationship between workload and burnout levels among physicians, which contrasts with the elevated burnout seen in physicians relative to nurses in other studies such as Luangdansakul's (2022) work with resident and obstetrics-gynecology physicians. These discrepancies underscore the variability in burnout manifestations across healthcare roles and the necessity of tailored interventions.

Our study's findings also reinforce that work-related factors outweigh personal demographic characteristics in predicting burnout. Nagle et al.'s (2024) systematic review identified numerous contributing factors to healthcare workers' burnout, including socio-demographics, personality traits, stress resilience, job experience, and workload. However, consistent with our results, recent studies highlight that workplace environment variables such as job control, support systems, and organizational pressures are more influential in driving burnout than personal factors (Angelini, 2023; Aronsson, et al., 2017; Taranu, et al., 2022; Shanafelt, et al., 2015). Notably, while our study was conducted post-pandemic, literature suggests that under acute stress situations like COVID-19, personal factors such as anxiety and neuroticism can modulate burnout risk, particularly among frontline healthcare workers (Bianchi, et al., 2021; Denning et al., 2021). This highlights the complex and context-dependent nature of burnout predictors.

In addition to work-related factors, lifestyle behaviors emerged as significant predictors of burnout in our sample. Alcohol consumption and short sleep duration (less than six hours per night) were associated with higher burnout levels, supporting previous research findings. For instance, Ritsamret, Thammakul, and Laoraksawong (2022) reported that insufficient personal time increased burnout risk, while Membrive-Jiménez (2022) found that sleep disturbances were closely linked to burnout symptoms among nurses, suggesting that interventions like warm

lighting during night shifts could improve sleep quality and work performance. The relationship between alcohol use and burnout has also been documented extensively, with Kemperman's (2018) meta-analysis revealing significant associations particularly with emotional exhaustion and depersonalization. Studies by Tao, et al. (2023) and Chen, et al. (2022) further highlight how alcohol misuse may serve as a maladaptive coping mechanism exacerbating burnout severity, potentially mediated by musculoskeletal pain and personal beliefs about alcohol's stress-relieving effects.

While these findings provide valuable insights, the study has certain limitations. Conducted in a single private hospital with 263 beds and predominantly nursing staff, the results may not be generalizable to other healthcare settings or to physicians, who often experience different burnout dynamics. Future research should consider comparative studies across public and private sectors and include a broader range of healthcare professions to enhance generalizability.

Conclusion

The study found that most healthcare professionals experienced low levels of emotional exhaustion and depersonalization, alongside moderate to high levels of personal accomplishment. While personal characteristics did not significantly relate to burnout, several work-related factors—including outpatient responsibilities, close patient contact, insufficient rest, limited sleep duration, and alcohol consumption—were strongly associated with burnout.

In private hospital settings, even with relatively lighter workloads, the high organizational expectations driven by patient satisfaction goals and competition require continuous self-improvement from staff. This pressure contributes to moderate to high burnout, particularly reflected in the sense of personal accomplishment. Time pressures to meet patient needs and frequent close interactions add to workplace stress, as healthcare workers adapt their efforts to optimize patient care. Additionally, inadequate rest results in physical fatigue and heightened stress, while relying on alcohol as a coping strategy appears ineffective and may worsen burnout symptoms.

These findings highlight the importance of organizational support and effective workload management to reduce burnout and promote the well-being of healthcare workers in private hospitals.

Recommendations

This study highlights that work-related factors—especially excessive workload and prolonged working hours—are significantly associated with burnout among healthcare professionals. Additionally, the COVID-19 pandemic has disrupted healthcare operations, increased occupational stress, and elevated the risk of professional burnout. Therefore, it is imperative for hospital managers and healthcare policymakers to implement strategic workforce planning that ensures adequate staffing and aligns job responsibilities with actual workload demands. Furthermore, strengthening institutional preparedness for future public health emergencies is essential to mitigate the long-term psychological impact on healthcare workers.

Recommendations for Future Research

1. Future studies should collect data from a diverse range of healthcare settings, including small, medium, and large hospitals, as well as public hospitals, to provide a more comprehensive understanding of burnout across different contexts.

2. The findings from this study can serve as a foundational reference for investigating preventive interventions, such as lifestyle modifications or organizational strategies, aimed at reducing factors contributing to burnout in healthcare professionals.

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Conflict of interest

The authors declare that they have no conflict of interest with any commercial or association connecting with this article.

Ethical considerations

This study protocol was approved by the Institutional Review Board of Chulalongkorn University School of Medicine, Bangkok, Thailand, and was assigned IRB number 0050/66. All participants provided informed consent to confirm voluntary participation in the study.

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