The Effects of the Workplace Environment on the Mental and Emotional Health of Healthcare Workers

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Abstract

Background: Healthcare workers are often exposed to high levels of stress due to the demanding nature of their jobs. Prolonged exposure to stress can negatively affect both physical and mental health, leading to burnout and decreased work efficiency. The work environment in healthcare settings, along with coping strategies, plays a crucial role in determining the emotional well-being of healthcare professionals. This study investigates the impact of healthcare workers' job environment on their emotional health and the coping strategies they employ. Methods: This study was conducted with a sample of 400 healthcare professionals . Participants, aged 21 to 58, were selected through stratified random sampling. A standardized instrument, the Coping Strategies for Stressful Events (CSSE), was used to assess the coping strategies employed by participants. Demographic data and healthcare roles were collected through a separate questionnaire. The data were analyzed using SPSS v.16, with t-tests, ANOVA, and linear regression to examine relationships between coping strategies, work environment, and mental health outcomes. Results: The study found significant differences in coping strategies between male and female healthcare professionals, with females tending to use more emotion-centered strategies like wishful thinking and seeking divine support. Health status, family status, and years of employment also influenced the coping strategies used. Healthcare workers with better health were more likely to use positive strategies, while those with fewer years of experience employed problem-solving strategies more frequently. A positive correlation was found between the use of problem-solving and positive reassessment strategies and better emotional well-being. Conclusion: The emotional health of healthcare professionals is significantly influenced by both their work environment and coping strategies. Positive coping strategies, particularly problem-solving and positive reassessment, contribute to better mental and emotional well-being. Factors such as health status, family situation, and years of experience also play key roles in determining the coping strategies employed. These findings highlight the importance of creating supportive work environments and promoting effective coping strategies to improve healthcare workers' emotional health and job satisfaction.

Keywords: *Emotional Health, Workplace Environment.*

Introduction

In an era marked by rapid industrialization, technological advancements, and globalization, employees are increasingly expected to meet higher demands and perform more efficiently. Prolonged exposure to stress can negatively impact an individual's performance, leading to detrimental effects on both physical health and personal life. However, not all stress experienced is directly linked to the workplace. Various factors contribute to workplace stress, and certain professions are inherently more stressful than others.

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Occupations that require frequent human interaction and rapid decision-making, particularly those with significant financial, social, or other high-stakes consequences, tend to be among the most stressful (1).

Healthcare careers are often ranked among the six most stressful fields (1). However, stress levels vary among healthcare professionals, and not all individuals in these roles experience burnout. Research indicates that medical and nursing staff working in intensive care units report death-related stress as a primary concern, while those in internal medicine or surgical departments cite workload and staffing issues as their main stressors (2). Additionally, surgical nurses tend to assess emotional aspects of their work as less stressful compared to their oncology and hematology counterparts (3). In general, healthcare workers are particularly vulnerable to stress and burnout due to the high responsibility associated with patient care, where actions or inactions can significantly affect patients' lives (4).

Given that stress is a multifaceted phenomenon, it is crucial to understand the various factors influencing its perception and impact. Individuals experience stress differently based on their personal perceptions of what constitutes a stressor. Several factors that contribute to emotional strain in healthcare settings include: i) the inherently stressful nature of the profession, which combines work-related pressures with psychological dilemmas, ethical challenges, and patient expectations (5,6); ii) workplace anxiety, which can negatively affect care quality, job satisfaction, and overall well-being (7); iii) frequent interactions with patients and their families, leading to feelings of anger, embarrassment, or helplessness, particularly when solutions to patient problems are not forthcoming (6,7); iv) lack of support from colleagues and supervisors, conflicts within the healthcare team, unclear roles, and administrative issues, all of which contribute to psychiatric distress (7,8); v) individual characteristics such as personality, past experiences, emotional maturity, and demographic factors like age, gender, socioeconomic status, years of service, and family life, all of which can influence susceptibility to stress (8,9).

The cumulative effect of these factors, along with a professional's involvement in decision-making processes, can determine the severity of stress-related symptoms and their broader impact on emotional health (7). Workplace stressors accumulate over time, potentially leading to a range of physical, psychological, and behavioral responses, including psychosomatic illnesses (10). A study conducted across multiple countries highlighted time pressure, deadlines, poor working conditions, excessive workload, long hours, interpersonal conflicts, and administrative issues as primary stressors (10). Stress can also lead to adverse health outcomes, including mental health issues, substance abuse, smoking, and other health problems (11).

The impact of stress on healthcare professionals manifests in several forms: i) subjective experiences such as anxiety, depression, emotional withdrawal, and a gradual loss of empathy (8,9,12); ii) physical symptoms, including a variety of psychosomatic conditions, migraines, skin issues, gastrointestinal problems, cardiovascular diseases, and strokes (9,12,13); iii) behavioral changes such as irritability, alcohol dependence, and other addictive behaviors (11,14). Stress can undermine a professional's ability to deliver quality care, contributing to burnout and recurrent depressive episodes, and it may also reduce their overall quality of life, including their family life (15).

Psychological risk factors differ from other risks because they can have both negative and positive effects depending on the context. These factors are difficult to evaluate, as individuals vary greatly in their sensitivity to stressors, their perceptions of these stressors, and their responses to them (16). Cognitive evaluation plays a key role in how individuals assess the significance of stressful events and their ability to manage them (17). The evaluation process unfolds in two stages: in the first, an individual assesses whether the event is important and whether it poses a threat; in the second, the individual determines if their resources and abilities are sufficient to cope with the stressor (18,20). Lazarus and Folkman identify eight coping strategies, which may be problem-centered or emotion-centered, with effective stress management linked to a better quality of life and health (18).

A study examining the coping strategies and professional satisfaction of doctors revealed that they tend to favor problem-centered approaches aimed at direct problem-solving through positive action and reassessment. Female doctors were found to prefer emotion-centered strategies such as seeking spiritual

support, while male doctors tended to focus on resolving the problem itself. Older doctors were more likely to employ positive approaches (22). Research conducted with nurses in hospitals in various regions suggests that problem-centered coping strategies are associated with better mental health in managing workplace stress (23-26), whereas nurses in other regions were more likely to use emotion-centered strategies, which also correlated with positive mental health outcomes (27-29).

Materials and Methods

The study sample comprised 400 healthcare professionals, aged 21 to 58 years, . Among the participants, 29% were male, and 71% were female.

The sample included physicians, nurses with higher and university-level education, assistant nurses, other healthcare workers, and medical/nursing students who regularly interacted with patients. All hospital departments, including internal medicine, surgical, dialysis units, and the intensive care unit, were represented. Employees on sick leave during the study were excluded. The study protocol was approved by the hospital's Review Board. After informing department heads, the questionnaires were distributed, and written instructions were provided to all participants, who signed informed consent forms.

Study Instrument

A standardized tool, the Coping Strategies for Stressful Events (CSSE), was employed in this research. This instrument assesses the strategies individuals use to cope with stressful situations, focusing on their cognitive and behavioral attempts to manage internal and external demands that might exceed their capacity. The CSSE examines how individuals interact with their environment to protect their physical and mental health. The Greek version of the CSSE is based on Lazarus & Folkman's Ways of Coping, with permission from the original authors (30).

Factor analysis for the Greek population identified five major reliable factors, with distinct dimensions within factors 1, 3, and 4. The CSSE is categorized into two broad groups: problem-centered strategies (e.g., solving the problem, seeking social support, active engagement with the issue) and emotion-centered strategies (e.g., positive reassessment, wishful thinking, avoidance). Positive reassessment and problem-solving are both categorized under a positive approach, where individuals seek to view stressful events optimistically and develop specific strategies for addressing the problem. Seeking social support involves individuals turning to their social networks for help with their challenges.

Wishful thinking/reverie consists of dimensions related to wishing for miraculous outcomes or reflecting on how the situation could have been different. Avoidance/escaping is another factor, including denial and quitting, where individuals downplay or ignore the situation's significance. Hands-on problem-solving evaluates proactive engagement with challenges by directly addressing the issues or individuals involved. Factor analysis using oblique rotation was applied for each factor to examine their internal structures (23). Additionally, a separate demographic questionnaire was created, gathering information on sex, age, family status, education, residence, specialty, and years of employment at the hospital.

Validity and Reliability of the Instrument

The internal consistency of the instrument was evaluated using Cronbach's α and Standardized Item α. The overall internal consistency for the scale was α = 0.862, and the Standardized Item α was 0.866, indicating satisfactory reliability. The internal consistency coefficients for most variables were between 0.60 and 0.877, suggesting adequate internal cohesion. However, the scale for denial (α = 0.458) and hands-on problem-solving (α = 0.429) showed moderate internal consistency.

Statistical Analysis

Following data coding, preliminary tests were performed to determine if the data met the assumptions for parametric analysis. Exploratory and frequency analyses showed that the data had equal variations across

groups and followed a normal distribution. Given that the sample was random and the dependent variables were continuous, parametric tests were used to analyze the mean values. T-tests were conducted to compare two groups, and one-way ANOVA was employed for multiple group comparisons. Linear regression analysis was performed, with quality of life as the dependent variable and psychiatric morbidity as the explanatory variable, controlling for significant demographic factors correlated with quality of life using Pearson's r. SPSS v.23 software was used for all data analysis.

Results

The study sample comprised 400 participants (158 males, 242 females). Among them, 59.7% were nurses across three different levels, 30.3% were doctors, 9.5% held other healthcare roles, and 0.5% were students (P=0.001). Regarding educational background, 36.8% had completed higher education, 24.4% underwent post-secondary vocational training, 24.4% were university graduates, and 10% held a Master's degree (P=0.001).

The mean values for the coping strategies were as follows: positive approach (mean=32.6±5.7), seeking social support (mean=18.1±2.9), wishful thinking/reverie (mean=22.9±4.5), avoidance/escape (mean=26.2±3.8), and hands-on problem solving (mean=10.9±2.1).

Significant gender differences were observed in several coping strategies. Female participants scored higher on the wishful thinking/reverie scale (P=0.000), the wishful thinking subscale (P=0.003), and the seeking help from God scale (P=0.002). This suggests that women were more inclined to use wishful thinking and seek divine assistance compared to men. Specifically, female participants had higher mean values for the wishful thinking/reverie scale (M=23.6, SD=4.4) than males (M=21.2, SD=4.3), showing a significant difference (t=-3.649, df=198, P<0.05). Similarly, the wishful thinking subscale showed a significant variation, with females scoring higher (M=14.9, SD=3.1) compared to males (M=13.5, SD=2.9), (t=-3.033, df=198, P=0.003). In seeking God's help, females also scored higher (M=8.7, SD=2.1) than males (M=7.6, SD=2.1), with a significant difference (t=-3.210, df=198, P=0.002).

The presence of health problems also influenced coping strategies. Participants reporting no health issues tended to employ a more positive approach to life, with higher scores on both relevant subscales (t=-3.746, P=0.001), as well as denial (t=-2.525, P=0.12) . Furthermore, healthcare workers who adopted problem-solving (t=-3.793, P=0.000) and positive reassessment strategies (t=-3.313, P=0.001) reported fewer health problems and appeared to have better emotional well-being than those using other coping methods. Family status also had an impact, with single and married participants employing positive coping strategies more frequently than divorced or widowed individuals (P=0.003), (P=0.036), (P=0.039).This suggests that divorced and widowed individuals, due to their family circumstances, may not engage as much in these coping strategies.

Additionally, years of employment were found to significantly influence coping behavior. Participants with 20-30 years of experience scored higher on the wishful thinking/reverie (P=0.013) and wishful thinking (P=0.025) scales compared to those with fewer years of service. Those with 10-20 years of experience scored higher in the hands-on problem-solving scale (P<0.01) . This may indicate that newer employees, possibly due to short-term contracts or early career stages (such as resident doctors or novice nurses), are less likely to actively engage in problem-solving efforts. Regarding health status, those in better health were more likely to use positive coping strategies, including positive reassessment and problem-solving (P=0.0001).

Table 1. T-test for men and women according to the Greek edition of the Coping Strategies for Stressful Events questionnaire.

Variables	Men (n=158)		Women (n=242)		Difference	
	M	SD	M	SD	Test	P
Positive approach	31.9	6.5	32.9	5.4	-0.976	0.332
Positive reassessment	20.6	4.1	21.5	3.5	-1,577	0.116
Problem solving	11.3	2.7	11.4	2.4	-0.126	0.900
Quest for social support	17.9	2.8	18.2	2.9	-0.690	0.491
Wishful thinking-reverie	21.2	4.3	23.6	4.4	*-3.649*	*0.000*
Wishful thinking	13.5	2.9	14.9	3.1	*-3.033*	*0.003*
Search divine help	7.6	2.1	8.7	2.1	*-3.210*	*0.002*
Avoidance/escape	26.4	3.7	26.1	3.9	0.383	0.702
Resignation	15.1	2.7	14.8	2.6	0.838	0.403
Refusal	11.2	2.1	11.4	2.1	-0.365	0.715
Assertiveness problem solving	11.2	1.7	10.8	2.2	1.294	0.197

M, mean; SD, standard deviation; test=on parametric Mann Whitney. P, P-value (bilateral). Italics the statistically significant results.

Discussion

This study aimed to explore the influence of work environment factors on the emotional well-being of healthcare workers using the CSSE questionnaire to assess coping strategies. The results were comparable to those found in the general population (30).

The response rate from participants was 91.36%, with a high level of engagement. This response rate aligns with those reported in similar studies, both in Greece and internationally, which typically report a participation range of 72-80% (31, 32). This high participation suggests that healthcare professionals are highly motivated to voice their concerns and experiences. Demographically, gender was found to influence the use of wishful thinking as a coping strategy, with women scoring higher in this area, as well as in seeking divine help. Female participants also had higher scores in the physical health, independence, and quality of life subscales when compared to their male counterparts (t=-2.155, P<0.05). These findings are consistent with previous research conducted in Greece (22), which revealed that female doctors tended to use emotion-focused coping strategies, such as wishful thinking and seeking spiritual support, while male doctors were more inclined to use problem-solving and positive reframing techniques. However, in studies conducted in Australia and New Zealand, nurses dealing with stress at work often employed problem-focused coping strategies (23-26).

Health status also emerged as a significant factor, with participants reporting no health problems scoring higher on positive coping strategies, including positive re-assessment and problem-solving, while also exhibiting higher levels of denial. These findings are consistent with a Finnish study, which showed a preference among healthcare professionals for self-treatment in both physical and mental health issues (33). However, education, type of employment, and professional role did not significantly affect responses on the CSSE questionnaire.

Family status, including marital status, had a noticeable impact on the use of positive coping strategies such as problem-solving and positive re-assessment. Single and married individuals tended to employ these strategies more frequently compared to divorced or widowed individuals. This observation aligns with a study by Cooper et al. (10), which concluded that both physical and mental well-being are influenced not only by work conditions but also by personal and family dynamics. The length of employment also appeared to influence coping strategy use, with healthcare workers who had been employed for 20-30 years using wishful thinking and problem-solving more frequently than those with less experience, who were more likely to resort to positive re-assessment. Interestingly, newer healthcare workers (with 1-10 years of experience) displayed healthier social relationships and better mental and physical health than their more experienced counterparts, suggesting that newer workers may experience less work-related stress (35, 36).

Perceptions of health status also influenced coping responses. When healthcare workers viewed their health positively, they were more likely to use positive approaches, re-assessment, and problem-solving strategies, leading to reduced stress and improved quality of life.

Pearson's correlation analysis revealed that increased use of positive approaches, re-assessment, problem-solving, and seeking social support was linked to lower levels of stress, depression, and physical illness. Conversely, strategies like avoidance or denial were associated with higher levels of stress and negative health outcomes. These results align with the findings of Lazarus & Folkman (34), who emphasized that when individuals fail to address the root causes of stress, it exacerbates the problem, leading to chronic stress, depression, and fatigue.

A key conclusion of this study is that stress is a major risk factor for healthcare workers' emotional health. This finding supports the notion that improving work conditions and reducing stress levels are essential for healthcare workers' well-being. Similar conclusions have been drawn in studies that highlight how stressful work environments contribute significantly to burnout and job dissatisfaction, often influencing workers' decisions to remain in or leave their roles (35, 36). A Greek study by Datsis et al. (37) also found that excessive stress could drive health professionals to consider leaving their jobs.

Conclusions

The emotional and mental well-being of healthcare professionals is significantly affected by their work environment and the coping strategies they use. Strategies such as positive re-assessment, quitting, and seeking social support play crucial roles in determining physical, mental, and social health outcomes. Gender differences were also observed, with women exhibiting better physical health than men. Coping strategies are vital in managing stress and improving physical and psychosocial health, and health workers should be trained in stress management techniques, relaxation exercises, and coping strategies. Institutions should consider implementing psychological support programs, ensuring active involvement of healthcare workers in decision-making, and providing strong managerial support for the well-being of medical and nursing staff.

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