

The Relationship Between Job Burnout and the Health Status of Intensive Care Unit Nurses: A Cross-Sectional Study

Abstract

Background: Intensive care unit (ICU) nurses face significant occupational stress, leading to job burnout and compromised health, which affects patient care quality. This study examines the relationship between job burnout and general health among ICU nurses in Sanandaj, Iran, in 2024. **Materials and Methods:** A cross-sectional, descriptive-analytical study was conducted with 101 ICU nurses from three Sanandaj hospitals, selected via simple random sampling. Data were collected using the Maslach Burnout Inventory (MBI), the General Health Questionnaire (GHQ-28), and a demographic questionnaire. Statistical analyses included Pearson's correlation, t-tests, ANOVA, and linear regression, performed with SPSS version 17. **Results:** Participants [mean (SD) age 35.10 (7.51) years, 58% female] showed a high burnout mean, 55.99 (11.03), and a poor general health mean, 54.41 (14.07), with anxiety/insomnia, 14.75 (4.83), most prevalent. A significant moderate positive correlation ($p < 0.001$) was found between burnout and general health, indicating worse health with higher burnout. Burnout was negatively correlated with work experience ($r = -0.23$, $p = 0.018$) and income ($r = -0.22$, $p = 0.025$) and weakly positively correlated with overtime ($r = 0.20$, $p = 0.044$). General health was negatively correlated with work experience ($r = -0.22$, $p = 0.023$) and income ($r = -0.30$, $p = 0.002$). Linear regression showed marital status ($p = 0.021$) and general health ($p < 0.001$) as significant burnout predictors. **Conclusions:** High burnout among ICU nurses in Sanandaj is linked to poorer health, influenced by marital status, work experience, overtime, and income. Interventions targeting workload and stress are vital for nurse wellbeing and healthcare outcomes.

Keywords: Burnout, health status, intensive care units, nurses

Introduction

Nurses play a pivotal role in delivering healthcare services, and their wellbeing directly impacts the quality of patient care.^[1] They are continuously exposed to various stressors, including excessive expectations from patients' families, heavy workloads imposed by the healthcare system, catastrophic events, sleep deprivation, and resource shortages. These stressors can negatively affect their mental health and job performance.^[2,3] Workplace stressors and unexpected situations in nursing contribute to feelings of uncertainty, frustration, anger, fear, anxiety, and depression.^[4] The cumulative impact of these stressors can lead to significant issues such as job burnout and workforce attrition.^[5] One of the most critical consequences of occupational stress is job burnout, characterized by emotional exhaustion, depersonalization,

and a reduced sense of personal accomplishment.^[6] Intensive care unit (ICU) nurses, due to their continuous exposure to critical situations and high patient mortality rates, are at a greater risk of experiencing burnout.^[7,8] Persistent exposure to crises and patient deaths increases the likelihood of depression and burnout among these nurses.^[9-11] The COVID-19 pandemic has further exacerbated this issue in recent years.^[12] Job burnout among nurses can lead to mental fatigue, lack of motivation, and absenteeism, which, in turn, exacerbate nurse shortages and compromise patient safety.^[13] It is a key factor that directly impacts nurses' wellbeing and job performance.^[14]

Job burnout not only reduces nurses' quality of life but also increases the risk of medical errors, thereby jeopardizing patient outcomes.^[15] Furthermore, the economic

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burden of job burnout—including costs related to staff turnover and lost productivity—places additional strain on healthcare institutions.^[16] Addressing this issue is, therefore, a priority to ensure the sustainability of healthcare services and to support the workforce that underpins the healthcare system.^[17] Global studies indicate that the prevalence of job burnout among nurses varies. In a hospital in Brazil, 10% of nurses reported experiencing burnout, while 55.4% were at risk of developing it.^[18] A meta-analysis revealed that the prevalence of job burnout among hospital nurses in Iran is approximately 25%.^[19] Similarly, a study reported that around 40% of emergency nurses experience job burnout.^[3] In the United States, a survey found that more than 60% of ICU nurses reported moderate to severe burnout, which was associated with increased levels of anxiety and depression.^[20] Likewise, in Europe, job burnout has been linked to a higher prevalence of musculoskeletal disorders among nurses due to chronic stress.^[21] In Iran, where the healthcare system faces additional challenges such as resource shortages and high patient loads, ICU nurses report higher levels of job burnout compared to those in many developed countries.^[22]

Health is a multidimensional concept encompassing physical, psychological, and social wellbeing.^[23] Several factors, including long working hours, lack of support, heavy workloads, workplace violence, staff shortages, inadequate resources, insufficient equipment, lack of respect, and exclusion from decision-making processes, significantly impact nurses' health.^[24] General health can be assessed based on symptoms related to anxiety, depression, somatic complaints, or social dysfunction.^[25] A meta-analysis of 17 studies in Iran found that occupational stress among Iranian nurses exceeds normal levels and reaches hazardous thresholds.^[26] Healthy nurses are essential for maintaining high standards of care, especially in ICUs, where patients require intensive monitoring and intervention.^[27]

Several studies in Iran have shown that the prevalence of job burnout among nurses is high, and ICU nurses, due to their demanding working conditions, are at greater risk. Despite these findings, actions taken by health authorities to improve nurses' health have been limited and fragmented, and effective policies have not been fully implemented. Gaps such as the lack of effective interventions, insufficient focus on ICU nurses, and inadequate assessment of general health still remain. Accordingly, this study aimed to investigate the relationship between job burnout and the health status of ICU nurses working in teaching hospitals in Sanandaj, Iran, in 2024.

Materials and Methods

This study employed a cross-sectional, descriptive-analytical design to investigate the relationship between job burnout and general health among nurses working in ICUs. Conducted in 2024, the research took place in three major

teaching hospitals affiliated with Kurdistan University of Medical Sciences in Sanandaj, Iran—Kosar Hospital, Tohid Hospital, and Besat Hospital. These hospitals were selected for their roles as prominent educational and referral centers, offering diverse working environments for ICU nurses exposed to varying levels of occupational stress. Data were collected across multiple ICU units: ICUs 1, 2, and 3 at Kosar Hospital; the general and cardiac ICUs at Tohid Hospital; and the Women's ICU at Besat Hospital. This multisite approach allowed for comprehensive representation across ICU specialties, thereby enhancing the ecological validity of the findings.

The study population included all ICU nurses employed in the selected hospitals, totaling 101 individuals according to staffing records. Participants were selected using a simple random sampling method, based on a numbered list of eligible nurses provided by the hospital administrations. Random numbers were generated using a computer-based tool to ensure an unbiased selection process. The sample size was calculated based on a previously reported correlation coefficient of 0.37 between job burnout and general health, with a significance level (α) of 0.05 and a power ($1-\beta$) of 80%. Using the standard formula for correlation studies, the minimum required sample size was determined to be 55. To account for a potential 10% attrition rate, the sample size was increased to 60. Ultimately, all 101 eligible ICU nurses completed the study protocol, enhancing statistical power and allowing for subgroup analyses.

Eligibility criteria were carefully defined to minimize potential confounding by major life stressors as described in the Holmes–Rahe Stress Scale. Participants were required to voluntarily provide informed consent, hold at least a bachelor's degree in nursing (master's degrees were also accepted), have a minimum of 6 months of ICU work experience, and report no history of psychiatric disorders. In addition, to control for the confounding effects of recent major stress exposure, nurses with a history of bereavement within the past 6 months or use of psychiatric medications during the same period were excluded. These criteria were intended to reduce the influence of major personal stressors and mental health conditions that could bias the relationship between job burnout and general health. Nurses who failed to complete the full set of questionnaires were also excluded from the analysis. Data were collected using three validated Persian-language instruments. First, a researcher-developed Demographic and Work-Related Characteristics Checklist gathered baseline information, including age, gender, marital status, education level, employment type, clinical and ICU-specific experience, work shifts, monthly income, second job status, smoking and alcohol use, and frequency of physical activity. This tool was piloted among 10 ICU nurses (excluded from the final analysis) to ensure clarity and relevance, with minor modifications made based on their feedback.

Second, the Maslach Burnout Inventory (MBI), developed by Maslach and Jackson in 1986, was used to assess burnout.^[28,29] This 22-item instrument evaluates three dimensions: emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items), using a 7-point Likert scale ranging from 0 (never) to 6 (every day). Higher scores in emotional exhaustion and depersonalization, along with lower scores in personal accomplishment, indicate higher levels of burnout. The Persian version has demonstrated good internal consistency, with Cronbach's alpha values ranging from 0.73 to 0.84.^[30]

Third, general health was measured using the GHQ-28, a 28-item questionnaire developed by Goldberg in 1978.^[25] It evaluates four domains: somatic symptoms, anxiety and insomnia, social dysfunction, and depression. Each subscale includes seven items rated on a 4-point Likert scale (0–3), yielding a total score ranging from 0 to 84, where higher scores reflect poorer general health.^[25,31] The Persian version has shown robust psychometric properties, with Cronbach's alpha values reported as high as 0.86.^[32]

Data collection was conducted during mid-shift hours (typically between 10:00 and 14:00 or between 16:00 and 20:00) to minimize potential fatigue-related bias. After explaining the study objectives and obtaining written informed consent, the researcher distributed paper-based questionnaires directly to the ICU units. Participants completed the forms in private and returned them immediately to the researcher. Each session took approximately 20–30 minutes. To ensure consistency and maintain data quality, the same researcher conducted all data collection procedures, and completed questionnaires were coded to preserve anonymity.

Data were analyzed using SPSS version 17 (IBM Corp., Armonk, NY, USA). Initial data checks involved identifying missing values, outliers, and inconsistencies. Incomplete questionnaires were excluded. Descriptive statistics were used to summarize participant characteristics, with frequencies and percentages for categorical variables and means with standard deviations for continuous variables. The normality of continuous variables, such as burnout and GHQ-28 scores, was assessed using the Kolmogorov–Smirnov test. For normally distributed data, Pearson's correlation coefficient was used to examine associations between variables, independent sample t-tests compared means between binary groups, and one-way ANOVA assessed differences across categories with more than two levels. For data that did not meet the normality assumption, nonparametric tests—such as Spearman's correlation, Mann–Whitney U, and Kruskal–Wallis tests—were applied.

To identify predictors of burnout, a multiple linear regression model was developed, with general health and significant demographic variables included as independent variables and burnout as the dependent variable. Assumptions of linearity, multicollinearity (evaluated using the variance

inflation factor, VIF <10), and homoscedasticity were tested to ensure the validity of the model. Statistical significance was set at $p < 0.05$, and all exact p values were reported. Where applicable, 95% confidence intervals were presented to enhance the interpretability and precision of estimates.

Ethical considerations

Ethical approval was obtained from the Ethics Committee of Kurdistan University of Medical Sciences (Approval Code: IR.MUK.REC.1403.089) prior to the study commencement. The research adhered to the principles of the Helsinki Declaration (1975, revised 2000), emphasizing voluntary participation, informed consent, and confidentiality. An introductory letter from the university was presented to hospital administrators to secure institutional cooperation. Participants received a detailed explanation of the study's objectives, procedures, and their right to withdraw at any time without penalty. Written informed consent was obtained from each nurse, and all questionnaires were anonymized using unique codes instead of personal identifiers. Data were stored securely on a password-protected computer accessible only to the research team.

Results

The mean (SD) age of participants was 35.10 (7.51) years, with a mean (SD) work experience of 19.72 (13.24) years across departments and 6.95 (5.77) years in the ICU. Most participants were female and single and held a bachelor's degree, with the majority working rotating shifts. Only a small proportion reported smoking, alcohol consumption, or holding a second job. Additionally, 44.6% of the nurses reported engaging in regular physical activity, 63% did not have children, 85% had no history of illness, and 91% did not provide elderly care at home. The mean (SD) overtime hours were 58.93 (18.41) hours per month, and the mean (SD) income was 18.4 (4.80) million Tomans per month [Table 1].

Regarding occupational outcomes, participants reported relatively high burnout scores, 55.99 (11.03), with emotional exhaustion being the most affected dimension and personal accomplishment the least. The mean general health score was 54.41 (14.07), suggesting suboptimal health status. Among its domains, anxiety and insomnia had the highest mean score, indicating the greatest health concern [Table 2].

Pearson's correlation coefficient was used to analyze the relationships between age, work experience, overtime, income, and ICU work experience with job burnout and general health. The results showed a significant correlation between job burnout and work experience ($r = -0.23$, $p = 0.018$), overtime ($r = 0.20$, $p = 0.044$), and income ($r = -0.22$, $p = 0.025$). Specifically, job burnout was negatively correlated with work experience and income, meaning that as work experience and income increased, burnout decreased,

Table 1: Demographic and occupational information of participants

Variable	Subgroup	Frequency (%) or Mean (SD)
Age (years)	-	35.10 (7.51) *
Work experience (years)	-	19.72 (13.24) *
ICU experience (years)	-	6.95 (5.77) *
Overtime per month (hours)	-	58.93 (18.41) *
Monthly income (million Tomans)	-	18.4 (4.80) *
Gender	Male	(41.60) 42 **
	Female	(58.40) 59 **
Marital Status	Married	(39.60) 40 **
	Single	(60.40) 61 **
Education	Bachelor's Degree	(91.10) 92 **
	Master's Degree and above	(8.90) 9 **
Employment Status	Permanent	(63.40) 64 **
	Contractual	(12.90) 13 **
	Temporary	(4.00) 4 **
	Service Commitment Plan	(19.70) 20 **
Shift Status	Rotating	(78.20) 79 **
	Fixed	(21.80) 22 **
Second Job	Yes	(4.00) 4 **
	No	(96.00) 97 **
Smoking	Yes	(9.90) 10 **
	No	(90.10) 91 **
Alcohol Consumption	Yes	(4.00) 4 **
	No	(96.00) 97 **
Exercise	Yes	(44.60) 45 **
	No	(55.40) 56 **
Has Children	Yes	(35.60) 36 **
	No	(64.40) 65 **
Number of Children	None	(63.40) 64 **
	One	(19.80) 20 **
	Two	(14.90) 15 **
	Three	(2.00) 2 **
History of Illness	Yes	(14.90) 15 **
	No	(85.10) 86 **
Elderly Care Responsibilities	Yes	(8.90) 9 **
	No	(91.10) 92 **

*Mean (SD). **Frequency (%)

but was positively correlated with overtime, meaning that higher overtime hours were associated with increased burnout. However, these correlations were weak. A significant negative correlation was also observed between general health and both work experience ($r = -0.22$, $p = 0.023$) and income ($r = -0.30$, $p = 0.002$), meaning that higher work experience and income were associated with better general health, though the correlation strength was weak. No significant associations were found between general health and age ($r = -0.16$, $p = 0.094$), ICU experience ($r = -0.06$, $p = 0.393$), or overtime ($r = -0.01$, $p = 0.918$) [Table 3].

Table 2: Mean and standard deviation of job burnout and general health

Factor	Mean (SD)
Job Burnout	
Emotional Exhaustion	23.44 (6.67)
Depersonalization	9.33 (2.69)
Personal Accomplishment	23.00 (4.41)
Total	55.99 (11.03)
General Health	
Physical Symptoms	14.07 (4.13)
Anxiety and Insomnia	14.75 (4.83)
Social Dysfunction	14.46 (3.03)
Depression	11.11 (4.22)
Total	54.41 (14.07)

To examine the relationship between gender, marital status, education level, second job, smoking, alcohol consumption, physical activity, having children, history of illness, elderly care, number of children, and employment status with job burnout and general health, independent t-tests and one-way ANOVA were used. The results showed no significant associations between these variables and job burnout or general health [Table 4].

To assess the simultaneous effects of demographic variables and general health on job burnout, linear regression analysis was performed. The results showed that only marital status and general health were significant predictors of job burnout, while other variables did not exhibit significant effects [Table 5].

Pearson's correlation test was conducted to evaluate the association between job burnout and general health. The results indicated a significant positive correlation between job burnout and general health, with a moderate correlation strength, suggesting that higher job burnout was associated with poorer general health [Table 6].

Discussion

This study examined the correlation between burnout and general health among ICU nurses. The Pearson correlation coefficient test revealed a significant, moderate positive relationship between burnout and general health among ICU nurses, indicating that as burnout increases, general health declines. This finding aligns with existing literature, emphasizing the global impact of burnout on nurses' wellbeing. Wang (2019) found a similar correlation between burnout and reduced health-related quality of life among Chinese ICU nurses, attributing it to chronic stress from high patient acuity and emotional demands.^[33] Guttormson (2022) highlighted that burnout significantly predicted mental health issues, such as anxiety and insomnia, among U.S. ICU nurses during the COVID-19 pandemic, suggesting a bidirectional relationship where poor health exacerbates burnout.^[34] Additionally, Kelly (2021) observed that burnout was associated with increased physical and psychological

Table 3: Correlation between demographic/occupational variables and job burnout and general health

Variable	Correlation with Job Burnout (<i>p</i>)	Pearson Correlation	Correlation with General Health (<i>p</i>)	Pearson Correlation
Age	0.187	-0.31	0.094	-0.16
Work Experience	0.018	-0.23	0.023	-0.22
ICU Experience	0.551	-0.06	0.393	-0.06
Overtime	0.044	-0.20	0.918	-0.0
Income	0.025	-0.22	0.002	-0.30

*ICU=Intensive Care Unit

Table 4: Relationship between demographic/occupational variables and job burnout and general health

Variable	Job Burnout – Test Result	<i>p</i>	General Health – Test Result	<i>p</i>
Gender	0.82	0.419*	1.23	0.222*
Marital Status	0.41	0.679*	1.18	0.242*
Shift Status	1.00	0.320*	0.31	0.758*
Second Job	0.65	0.519*	0.93	0.355*
Smoking	1.40	0.165*	0.33	0.745*
Alcohol Consumption	1.17	0.249*	0.59	0.556*
Exercise	0.10	0.920*	1.52	0.130*
Has Children	1.35	0.185*	1.29	0.201*
History of Illness	1.33	0.187*	1.74	0.084*
Elderly Care Responsibilities	0.06	0.952*	0.55	0.583*
Number of Children	1.23	0.295**	1.05	0.355**
Employment Status	0.13	0.875**	1.56	0.213**
Education Level	1.57	0.123*	0.11	0.910*

*Independent *t*-test. **ANOVA=Analysis of Variance

complaints, including fatigue and depression, reinforcing its detrimental effects on overall health.^[35] The findings of Shakerinia (2009) and Yavari (2014) indicated a significant positive correlation between job burnout and nurses' mental health. This means that ICU nurses with poorer mental health experience higher levels of burnout. These results align with the present study.^[36,37]

Further supporting evidence comes from Bruyneel (2021), who documented that ICU nurses with higher burnout scores reported worse self-rated health due to prolonged exposure to intense workloads.^[38] Quesada-Puga (2024) identified a strong association between burnout and diminished overall health in ICU nurses, with emotional exhaustion being a key driver of physical and mental decline.^[15] Similarly, Galanis (2021) reported that burnout among Greek nurses during the pandemic correlated with poorer mental health outcomes, including increased anxiety and depressive symptoms.^[12] A meta-analysis by Woo (2020) further substantiated the broad health impact of burnout, linking it to physical symptoms like headaches and musculoskeletal pain among nurses.^[39]

However, the moderate strength of our correlation contrasts with some studies reporting stronger associations. Stelnicki (2020) noted a more robust link between burnout and health outcomes among Canadian nurses, possibly due to heightened pandemic-related stressors.^[40] Ramírez-Elvira (2021) also observed a

pronounced correlation, likely reflecting the acute impact of COVID-19 on Spanish ICU nurses.^[41] The moderate correlation in our study may suggest that stress levels are somewhat normalized within the Iranian healthcare system, or that cultural factors such as resilience and coping mechanisms mitigate burnout's full impact.

Moreover, our study identified weak but significant correlations between burnout and work experience (negative), overtime (positive), and income (negative). Wang (2019) supports the negative work experience–burnout link, suggesting that veteran nurses develop coping strategies over time.^[33] Kelly (2021) aligns with our positive overtime–burnout correlation, citing fatigue from extended shifts.^[35] Additionally, Cañadas-De la Fuente (2018) corroborates the negative income–burnout relationship, linking financial strain to heightened burnout.^[42] Galanis (2021) also found that longer working hours increased burnout risk, consistent with our overtime finding.^[12] Conversely, Laschinger (2019) reported a stronger overtime–burnout association, possibly due to more intense workloads in the North American sample.^[43] Our weaker correlations might indicate that ICU nurses in our study had more manageable overtime hours or experienced limited income variability compared to those in Laschinger's sample.

The findings also indicated that there was no significant correlation between age and job burnout, aligning with the studies of Kowalski^[44] and Khamernia.^[45] However, this

Table 5: Linear regression results

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	p
Age	0.19	0.24	0.12	0.448
Gender	-1.10	2.37	-0.05	0.643
Marital Status	-5.52	2.35	-0.24	0.021
Education Level	2.80	3.06	0.08	0.363
Work Experience	-0.05	0.05	-0.09	0.320
ICU Experience	0.18	0.25	0.09	0.470
Overtime	0.03	0.02	0.13	0.211
Employment Status	0.63	0.59	0.10	0.289
Income	-0.11	0.30	-0.04	0.722
Shift Status	-0.90	2.65	-0.03	0.733
Second Job	-5.51	5.28	-0.09	0.300
Smoking	-3.56	3.66	-0.09	0.334
Alcohol Consumption	-2.33	5.06	-0.04	0.646
Exercise	-0.75	1.99	-0.03	0.706
Has Children	6.46	4.67	0.28	0.171
Number of Children	1.23	2.88	0.09	0.668
History of Illness	2.21	3.04	0.07	0.470
Elderly Care Responsibilities	0.76	3.34	0.02	0.820
General Health	0.52	0.07	0.67	<0.001

*ICU=Intensive Care Unit

Table 6: Correlation between job burnout and general health

Job Burnout	General Health
Pearson Correlation	1
p	<0.001
General Health	Pearson Correlation
p	<0.001

finding contrasts with the results of Maslach^[46] and Jackson, Spooner,^[47] Shakerinia,^[36] Kohpayezade,^[48] and Jabali.^[49] According to Shakerinia, age was the strongest predictor of job burnout, meaning that as age increases, psychological stress and burnout also tend to rise. Furthermore, the results showed no significant relationship between general health and variables such as age, marital status, and employment status among nurses. This finding is consistent with the study by Yavari *et al.*,^[37] suggesting that factors other than demographic characteristics may influence health. This implies that poor health can occur at any age, regardless of marital status or employment conditions, indicating that these factors do not directly impact mental health.

Regarding general health, we observed a weak negative correlation with work experience and income. Guttormson (2022)^[34] supports this, linking longer experience to poorer mental health due to cumulative stress. Stelnicki (2020)^[40] also agrees on income, noting that financial security acts as a buffer against health decline. However, Wang (2019)^[33] found a stronger health decline with experience, possibly due to higher patient acuity among more experienced nurses. Woo (2020)^[39]

similarly linked experience to physical health deterioration, contrasting our weaker finding. These discrepancies suggest that coping strategies or less variable conditions may reduce the impact of work experience on health in our sample.

Interestingly, no significant relationships were found between burnout or general health and variables such as gender or smoking. This contrasts with Ramírez-Elvira (2021),^[41] who noted higher burnout levels in female nurses. The lack of significance in our study may be due to sample homogeneity or cultural factors that mask differences observed in other settings.

Linear regression analysis identified marital status and general health as significant predictors of burnout. Bruyneel (2021)^[38] supports the marital status effect, reporting lower burnout levels among married nurses due to social support mechanisms. However, the explanatory power of our regression model was limited, highlighting the need for future research incorporating additional predictors such as workplace support systems and coping mechanisms.

This study faced several limitations, including the heavy workload of nurses, which limited the time available for completing questionnaires. The use of self-reported questionnaires may have reduced the accuracy of responses. Additionally, the study was conducted in a limited number of hospitals, restricting the generalizability of the findings. The cross-sectional design also did not allow for establishing causal relationships.

For future research, longitudinal studies are recommended to examine changes over time. Utilizing more objective assessment methods, such as medical evaluations, could provide more accurate results. Implementing psychological and educational support programs may help reduce nurses' burnout. Furthermore, conducting studies in a broader range of hospitals could enhance the generalizability of the findings.

The findings of this study suggest that measures can be taken in the areas of education, clinical practice, management, and research to reduce job burnout and improve the mental health of nurses. In terms of education, refresher programs on error prevention in healthcare systems and in-service training to enhance psychological resilience and prevent burnout are recommended. In clinical practice, organizing training sessions on stress management skills and conducting regular mental health assessments for nurses are essential. When necessary, individual and group counseling sessions can help reduce stress and improve performance. Regarding management, given the impact of job burnout on productivity and hospital costs, it is suggested that managers identify sources of stress and take steps to reduce work-related pressures. Improving welfare facilities, involving nurses in decision-making, providing professional support, fostering a positive work environment, and implementing motivational programs can significantly enhance working conditions. This study has some limitations. The cross-sectional design limits causal inferences between job burnout and general health. The sample was restricted to ICU nurses in three hospitals in Sanandaj, which may limit generalizability to other settings or nurse populations. Self-reported data may introduce response bias, and unmeasured factors, such as workplace culture or personal stressors, could have influenced the results.

Conclusion

The moderate positive correlation between burnout and general health underscores a critical issue for ICU nurses, consistent with extensive global evidence. While our findings align with prior research, the moderate correlation strength suggests potential cultural, systemic, or methodological influences that warrant further investigation. Secondary findings regarding work experience, overtime, income, and marital status offer nuanced insights, though their weak associations indicate the need for deeper exploration. Addressing burnout through targeted interventions, such as workload management, psychological support, and policy reforms, is essential to safeguard both nurses' wellbeing and patient outcomes. Future longitudinal and qualitative studies should explore the underlying mechanisms influencing burnout and health to develop effective, context-specific solutions.

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Conflicts of interest

Nothing to declare.

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