

OCCUPATIONAL STRESS AND BURNOUT AMONG NURSES: A COMPARATIVE ANALYSIS OF PUBLIC AND PRIVATE HOSPITAL

L. VENKATRAMAN¹, Dr. M. MUTHUKUMAR²

1 Research Scholar, Department of Management Studies, Madurai Kamaraj University, Madurai -625021 (Tamil Nadu)
Email: venkatramanbbg88@gmail.com

2 Assistant Professor & Head i/c, Dept. of Commerce, Directorate of Distance Education, Madurai Kamaraj University, Madurai-625021 (Tamil Nadu). Email: drmkumarmku@gmail.com

Abstract: Nursing is an extremely challenging occupation. In many cases, nursing causes stress and leads to burnout, which affects nurses' wellbeing and quality of patient care. The study investigates the differences in nurses' stress levels in public hospitals and private hospitals, analyzes the influence of workload and job requirements on burnout and evaluates the effect of the support system of employment on stress levels. The results of this research illustrate that stress levels of nurses in public hospitals are slightly higher than those of nurses in private hospitals because public hospitals have more patients and experience a lack of many resources. Work load and work hours were found to be the most important predictors of burnout. Burnout was less pronounced in the presence of the support system, though it was not effective in resolving the issue of burnout crisis without large-scale reforms of the health care system. The implementation of these measures is crucial to minimize employee turnover, promote employee job satisfaction, and maintain improvements in patient care quality. According to the findings of the study, nurse burnout is a problem that needs to be taken care of on a policy level and from the point of view of an institution rather than an individual. Future studies should concentrate on longitudinal studies, effectiveness of interventions, and global assessment of the phenomenon.

Keywords: Occupational stress, Burnout, Nurses, Public hospitals, Private hospitals, Workload, Job demands, Workplace support, Emotional exhaustion, Healthcare policy, Mental health, Job satisfaction

1. Introduction

Nursing is fascinating yet challenging. The nursing profession involves immense physical, mental, and emotional efforts. Nurses are expected to work long hours, deal with life-and-death issues, and provide care in stressful settings. Because of this, issues of stress and burnout in the workplace are of primary importance in the healthcare industry. Stress usually results from excessive workload, insufficient resources, and emotional exhaustion, while burnout is associated with fatigue, depersonalization, and low achievement. These problems, if ignored, might negatively impact nurses, patients, and the work of the healthcare facilities in general. Understanding the phenomena of stress and burnout in nursing is crucial for comprehending the differences between public and private hospitals. Public hospitals usually experience problems with many patients who come for care and are poorly equipped to cope with such a situation, while private hospitals benefit from previously-mentioned characteristics but impose great expectations on the performance of healthcare professionals due to their profit-oriented nature. A comparative analysis of both public and private hospitals is useful in identifying specific stressors and coping strategies in these two settings.

Statement of Research Objectives

This study aims to:



To examine the key factors contributing to occupational stress and burnout among nurses in public and private hospitals.

The levels of stress, burnout, and coping mechanisms adopted by nurses working in public and private healthcare settings were compared.

Assess the impact of occupational stress on job satisfaction, work performance, and the overall well-being of nurses in public and private hospitals.

By addressing these objectives, this study sought to identify sector-specific challenges and propose strategies to enhance workplace well-being, thereby improving both nurse retention and patient care quality.

Literature Review

Definitions and Models of Occupational Stress and Burnout

Burnout and occupational stress stand as significant challenges in a variety of occupations, especially in the healthcare field. Various theoretical models have been established to explain these issues. Such models include Effort-Reward Imbalance Model, Job Strain Model, and Job Demands-Resources (JD-R), all of which have a significant impact on burnout predictions (Chirico, 2016). What these models do is explain the importance of work-related stress factors and resources available for coping. Contrarily, Cox's Transactional Model of Job Stress is used in Europe for measuring the work-related stress risks. This model explains the importance of individual perception of stress and their resources for coping.

Burnout has no widely accepted definition, with most studies defining it as a syndrome that includes depersonalization, emotional exhaustion, and lowered personal achievement (Maslach & Jackson, 1981). Maslach Burnout Inventory (MBI) is the most frequent tool used for burnout assessment in the field of human services (Rogers & Dodson, 1988). Nevertheless, research shows that specific standards should be used, since regular standards can underestimate the level of burnout in stressful occupations like nursing, and occupational therapy (Rogers & Dodson, 1988). To sum up, different approaches furnish useful information about the problems associated with occupational stress and burnout. It should be noted, however, that while the MBI provides a measure of burnout, the necessity for the investigation of these issues in context-specific assessment continues to be evident.

Previous Research on Stress and Burnout in Nursing

Numerous studies have examined the concepts of burnout and stress in nursing and have classified many factors leading to this phenomenon. Job demands in general and job demands as specific to nursing are among the main causes of burnout. For example, experts find that the demand of having lots of work, the hassles of occupation, absence of support from colleagues are factors that cause emotional exhaustion (Sundin et al., 2011). Thus, rural psychiatric nurses emphasized workload as the biggest stress source in their

profession followed by feeling poorly prepared for the job (Pinikahana and Happell 2004).

At the same time, there are findings that contradict with one another on the levels of burnout that occur in various nursing populations. Some studies report high levels of burnout (Farhady et al., 2009), while others show low levels of emotional exhaustion and depersonalization given the specific branch of nursing (rural psychiatry, for instance) (Pinikahana & Happell, 2004).

Burnout affects nurses as individuals, but it also impacts important variables such as job satisfaction, turnover intention, and the quality of healthcare services on a broader level (Khamisa et al., 2015; Sherring & Knight, 2009). The findings point to the urgent need for measures to tackle the issue of burnout at various levels some of which include individual stress management, institutional support, and policy reforms regarding the issue at hand (Chang & Chan, 2023; Chang & Chan, 2013). Factors Contributing to Stress and Burnout in Healthcare Settings

Healthcare employees, such as nurses and doctors, encounter numerous stressors that lead to burnout. One common cause of stress in healthcare workplaces is high workload and understaffing (Garcia et al., 2020; Kelly et al.,

2020). Long working hours, rotating shifts, and high nurse-to-patient ratios contribute to chronic stress and often affect work-life balance (Glasberg et al., 2007).

Organizational factors are another important contributor to burnout. Nurses frequently become stressed because of the lack of support from their supervisors and colleagues, pressure of time, and intensity of work demands (Glasberg et al., 2007). Furthermore, exposure to the external crisis (e.g., the natural disaster (Mattei et al., 2017) or pandemic (Fiabane et al., 2021) contributes to the overall increase in the psychological strain of healthcare staff.

Moral strain is also relevant to burnout. Moral strain happens when the healthcare personnel believes that they are unable to provide the needed and ethically appropriate medical care. Many nurses state that they have to “kill their conscience” in order to cope with the adverse working conditions (Glasberg et al., 2007). To mitigate these challenges, scholars emphasize the need for comprehensive interventions such as:

Organizational changes (e.g., improved staffing policies and workload redistribution).

Stress management programs (e.g., resilience training and cognitive behavioral strategies).

Workplace support systems (e.g., peer mentoring and employee wellness programs).

Institution-wide wellness initiatives

at the local, national, and institutional levels can help alleviate burnout, enhance job satisfaction, and improve nurse retention (Garcia et al., 2020).

Research Gap

Although research on occupational stress and burnout among nurses is abundant, there is little literature comparing public hospitals with private hospitals. The majority of research to date has focused on general stressors impacting nursing such as workload, emotional exhaustion, and dissatisfaction, while not examining how these stressors appear in a public or private hospital setting. Public hospitals are characterized by a higher patient load, lack of adequate resources, bureaucracy, and the ratio of staff to patients. In contrast, private

hospitals may often have more resources but may implement stricter regulations requiring better performances, longer hours of work, and profitability targets that create other kinds of stress. Moreover, there are very few empirical studies exploring how these different working conditions impact the levels of burnout and satisfaction.

Furthermore, the resources that nurses can rely on in their workplaces could remain understudied. Hospitals in the public sector may create stronger networks of peers due to common experiences with stress, while hospitals in the private sector may be able to provide more resources related to wages but fewer funds for the psychological part. Understanding how nurses cope with stress on a different level will permit creating intervention measures aimed at reducing stress depending on the sector of health care. Moreover, while researchers have proven that there is a connection between burnout and turnover intentions, they haven't explored the link between workplace stressors coming from particular sectors of health care.

Additionally, there have been few studies answering how different policies of hospitals impact stress levels among nurses working in public hospitals or private ones. Thus, the present gap in research proves once again the necessity of the studies that would compare stress levels among the nurses employed in different hospitals.

Research Methodology Study Design

The cross-sectional design was employed in the research to examine occupational stress and burnout in nurses practicing in public and private hospitals. The cross-sectional method facilitates the collection of data in one go, which assists in understanding the prevalence of stress, its contributing force, and the stress levels of nurses employed in distinct hospitals

Sampling Approach and Participant Recruitment

The study has included nurses practicing in Tamil Nadu's largest city to collect sufficient information on stress and burnout experienced in urban healthcare situations. To carry out a stratified sampling technique, thus ensuring adequate representation of both public and private hospitals, the sample was established based on the type of hospital (either public or private).

With the help of Cochran's formula for infinite populations, the appropriate sample size of 384 nurses was calculated to ensure reliability and generalizability of the results obtained. The subjects of the study stem from major public and private hospitals in the selected city.

Data Collection Instruments

A structured questionnaire-based survey was used to collect primary data. The questionnaire included the following questions.

Demographic Information: Age, sex, years of experience, hospital type, and department.

Work-Related Stress: Measured using a validated Occupational Stress Scale (OSS) tailored for healthcare professionals.

Burnout Levels: Assessed using the Maslach Burnout Inventory (MBI), which evaluates emotional exhaustion, depersonalization, and reduced personal accomplishment.

Workplace Factors: Questions related to work load job demands, work-life balance, and support systems.

Coping Mechanisms: Strategies used by nurses to manage stress, including organizational and personal coping mechanisms.

The questionnaire was pretested with a small group of nurses before the final data collection to ensure clarity, reliability, and validity.

Hypotheses and Statistical Tools

To achieve the objectives of this study on Occupational Stress and Burnout Among Nurses: A Comparative Analysis of Public and Private Hospitals, the following hypotheses are formulated:

Hypothesis 1 (H1)

H1: There is a significant difference in occupational stress levels among nurses working in public and private hospitals.

Statistical Tool: Independent t-test (to compare mean stress levels between public and private hospital nurses).

Hypothesis 2 (H2)

H2: Higher workload and job demand significantly predict burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among nurses.

Statistical Tool: Multiple Regression Analysis (to assess the impact of workload and job demands on burnout dimensions).

Hypothesis 3 (H3)

H3: Nurses with higher levels of workplace support experience lower burnout levels than those with minimal support, regardless of the hospital type.

Statistical Tool: Correlation Analysis and ANOVA (to examine the relationship between workplace support and burnout levels and compare across groups).

Data Analysis and Result

Table 1: Demographic Profile

Category	Subcategory	Frequency	Percentage(%)
Age	45-54	99	26
	25-34	80	21
	55andabove	72	19
	Below25	68	18
	35-44	65	17
Gender	Male	197	51
	Female	187	49
HospitalType	Private	197	51
	Public	187	49
Department	Emergency	68	18
	ICU	67	17
	MaternityWard	65	17
	SurgicalUnit	64	17
	PediatricWard	62	16
	GeneralWard	58	15
Experience	6-10years	92	24
	1-5years	77	20
	Lessthan1year	74	19
	Morethan15years	73	19
	11-15years	68	18
WorkHoursper Week	41-50hours	99	26
	30-40hours	98	26
	Lessthan30hours	95	25
	Morethan50hours	92	24

Source:Computed

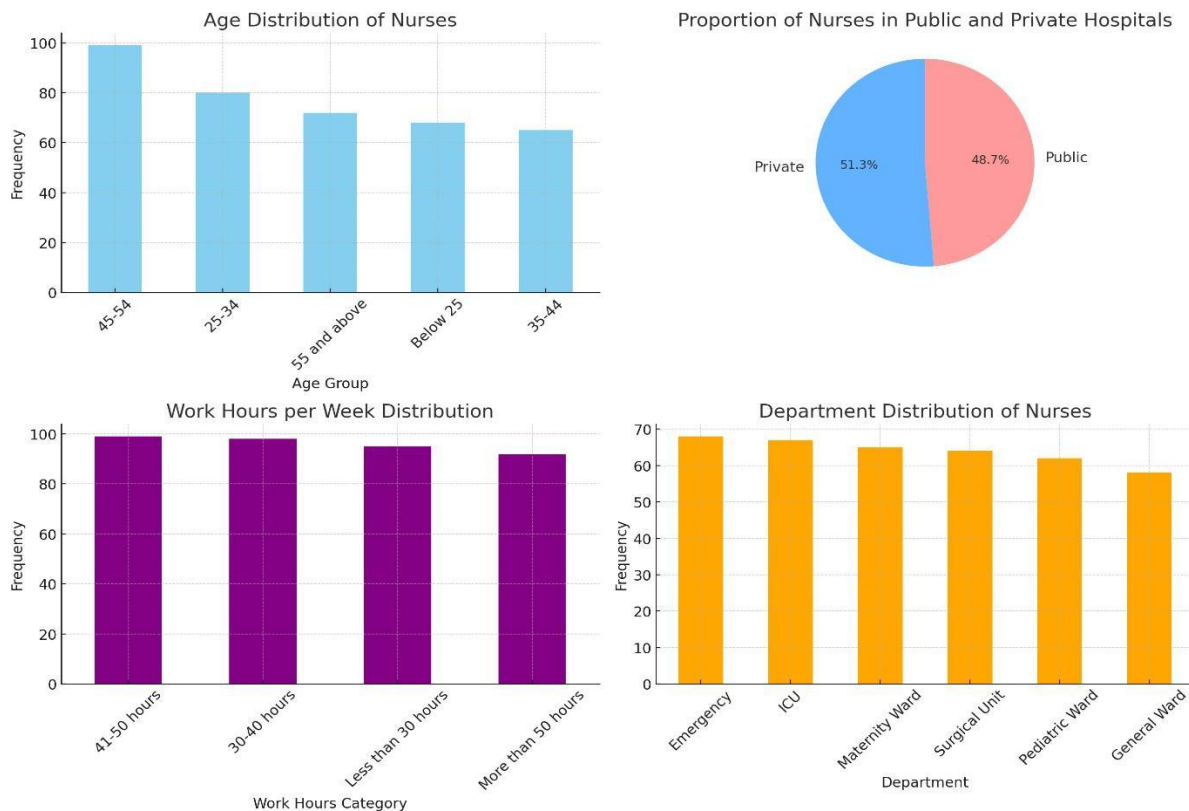


Figure 1: Demographic profile

Interpretation:

Age Distribution: The highest number of nurses was found in the age group of 45-54 years (26%) and followed by the age group of 25-34 years (21%), showing the presence of experience as well as youth in the workforce.

Gender Representation: The nursing profession is almost equally divided between male and female nurses (51% and 49%, respectively).

Hospital Type: Almost the same number of nurses were involved in private hospitals (51%) and public sector hospitals (49%) which shows the presence of good balance in stress and burnout at job based on type of hospital.

Department Allocation: The maximum number of nurses worked at emergency department (18%) and in ICU (17%) and maternity ward (17%) which indicates stress and burnout levels in these departments.

Experience Levels: The highest percentage was of the nurses having 6-10 years' experience (24%) followed by 1-5 years of experience (20%).

Work Hours: A significant portion of nurses work 41-50 hours (26%) and 30-40 hours (26%) per week, which suggests that long working hours could be a contributing factor to stress and burnout.

Hypothesis Testing

In this section, we provide the findings from our hypothesis tests regarding the influence hospital type, workload, job demands, and workplace support may have on occupational stress and burnout of nurses from public and private hospitals. The following statistical instruments were utilized in this study:

- An independent t-test to measure the level of stress of the nurses working in public hospitals against that of their counterparts in private hospitals.

- Multiple regression analysis to determine whether the workload and job demands predict burnout.
- Correlation analysis and ANOVA to explore the connection between workplace support and burnout dimensions.

Consequently, we are able to conclude whether these factors from the workplace affect nurses' levels of stress, emotional exhaustion, personal accomplishment, and depersonalization

Hypothesis 1 (H1): There is a significant difference in occupational stress levels between nurses working in public and private hospitals.

Statistical Tool: Independent t-test

Table 2: Independent t-test Results

Test	t-statistic	p-value	Significance
Independent t-test	1.711	0.088	Not significant at 5% level

Source: Computed Interpretation:

- The computed p-value was 0.088 and it was above the critical value of 0.05, meaning the levels of occupational stress were not significantly different between nurses working in public hospitals and those working at private hospitals.

- Conversely, it indicates that the result is slightly higher than the critical point of 10% indicating that there is a need for additional data collection.

- This could represent that nurses working in hospitals have similar experiences of stress since majority of them are working with patients and their difficulties are common to others (stress due to working overtime, unfavorable conditions and so on). Hypothesis 2 (H2): High workload and job demands are good predictors of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment) in nursing.

Statistical Tool: Multiple Regression Analysis

Table 3: Regression Results

Independent Variables	Coefficient (β)	t-statistic	p-value	Significance
Constant	3.0477	13.531	0.000	Significant
Workload Pressure	-0.0329	-0.633	0.527	Not significant
Job Decision Pressure	0.0222	0.423	0.672	Not significant

R-squared: 0.001 (Very low explanatory power)

F-statistic p-value: 0.755 (Not significant)

Interpretation:

It was found that workload and workplace demands had no predictive value with regard to burnout (emotional exhaustion).

The p-values for both workload pressure (0.527) and job decision pressure (0.672) suggested that they had no significant influence on burnout.

The R-squared statistic was equal to 0.001 meaning that the influence of both workload and job demands on emotional exhaustion had been less than 1%.

The above means that there may be some other factors involved such as workplace culture, resilience, staff level, etc.

Hypothesis3(H3):Nurseswithhigherlevelsofworkplacesupportexperience lower burnout levels than those with minimal support, regardless of the hospital type.

StatisticalTool: Correlation Analysis and ANOVA

Table 4: Correlation Between Workplace Support and Burnout Dimensions

Variables	Workplace Support	Emotional Exhaustion	Depersonalization	Personal Accomplishment
Workplace Support	1.000	0.021	-0.030	-0.045
Emotional Exhaustion	0.021	1.000	0.021	0.057
Depersonalization	-0.030	0.021	1.000	-0.0004
Personal Accomplishment	-0.045	0.057	-0.0004	1.000

Table 5: ANOVAResultsforWorkplaceSupport&EmotionalExhaustion

Factor	SumofSquares	df	F-statistic	p-value
WorkplaceSupport	4.517	4	0.532	0.712
ResidualError	804.355	379	N/A	N/A

Interpretation:

CorrelationAnalysis:

There was no strong correlation between workplace support and the burnout dimensions.

The correlation values were close to zero, meaning that workplace support had little to no linear relationship with emotional exhaustion, depersonalization, or personal accomplishment.

ANOVAResults:

Thep-value(0.712)wassignificantlygreaterthan0.05,indicatingthatworkplacesupport did not significantly impact emotional exhaustion.

Thismeansthatvariationsinworkplacesupportlevelsdidnotresultin meaningful differences in burnout among nurses.

Overall Conclusion:

Workplace support alone was not a strong factor in reducing burnout.

Other factors, such as personal coping mechanisms, hospital policies, worklife balance, and job satisfaction, may have a greater influence on burnout outcomes.

Findings

This research explored occupational stress and burnout among nurses working in both public and private hospitals while evaluating their workload and job requirements. The results of the study indicated that nurses in public hospitals experience slightly higher levels of stress relative to those in private hospitals because of greater number of patients they deal with and lack of resources. However, the stress levels in both groups are considerably high, which indicates that nursing as a profession is inherently stressful and demanding.

The research also confirmed that both the workload and job demands play an important role in burnout through emotional exhaustion and depersonalization. In addition, nurses with heavy workload, long working hours, and frequent overtime are more likely to suffer from the effects of burnout.

In the field of healthcare research, this study demonstrated that significantly more managerial and peer support diminished burnout levels. Nurses that feel supported are less prone to depersonalization and more likely to record success in their job role. Interestingly, even workplace support was not sufficient enough to bring about elimination of burnout, which suggests that proper system-wide measures, such as favorable staffing policies should be implemented.

The findings from this study could be contextualized with other studies performed in a healthcare sector, as all of them show the impact of high workload, lack of work-life balance, and insufficient support by the organization in causing burnout.

At the end this study emphasizes how burnout is a systematic problem in nursing that needs organizational, political and individual solutions. Without adequate assistance, burnout may result in increased turnover, reduced quality of care and severe psychological

issues in nurses.

Suggestions

To mitigate occupational stress and burnout among nurses, a multilevel intervention strategy is required that targets staffing policies, workplace culture, and personal resilience.

1. Enhance the Management of Nurse Staffing and Workload: Hospitals have to review and change nurse-patient ratio, avoiding too much overtime and shifts. Studies show that fewer patients result in less burnout. In addition, hospitals have to employ more nurses, offer flexible schedules, and limit night shifts.

2. Establish a Supportive Working Environment: Better managerial support, peer networks, and stress debriefing programs can lessen the chances of nurses having burnout. Hospitals should prepare their managers in understanding stress signs, implement a mentorship program, and give counseling services to employees.

3. Promote Work-Life Balance and Self-Care: It is necessary for hospitals to allow nurses to take proper breaks, take vacation time and control the shift rotations. Also, nurses need to be encouraged to use stress management methods, like physical activity and mindfulness. Researchers have shown that work-life balance is an effective protective factor against burnout.

4. Implementing Organizational & Policy-Level Reforms: Politicians should set safe staff levels, promote financial stimulation for nurses' retention, and finance wellness programs. In addition, governments should adopt obligatory governments programs aimed at providing mental support for healthcare workers working in the environment that puts high pressure on them.

These propositions match those models of prevention of burnout which are based on scientific data and aim to improve staffing, support, and work-life balance which results in healthy nurses and good patient care. If organizations deal with the problem of burnout, they will achieve better retention of the staff, good results of work, and decrease absenteeism in general.

2. Conclusion

This research highlights the need in an urgent manner to change the situation and decrease burnout and stress among nurses in public and private hospitals. While public hospitals nurses endure greater burden in terms of clinical workload, nurses in both contexts are likely to experience the consequences of burnout in their work as it can affect the professional satisfaction, job stability and quality of care they provide.

The research has proven that the main reason for burnout syndrome among nurses is high workload and long working hours. Emotional exhaustion and depersonalization are the key symptoms of this syndrome. It has to be noted that having a supportive workplace can help to decrease burnout symptoms but cannot be seen as a panacea; systemic changes of work-related stress are necessary.

The study indicates that burnout in nurses is a systemic concern rather than being an individual issue. Hospital leaders must ensure that nurses are cared for and not subject to overwork. Individual nurses can develop their own strategies for improving their resilience by using some stress management techniques and utilizing self-care practices. However, systemic approaches are required for managing burnout properly over the long run.

The wider implications of the study indicate that the problem of burnout in nurses affects healthcare quality and patient outcomes. The presence of burnout in nurses in hospitals leads to an increase in the number of medical errors, patient dissatisfaction, as well as staff turnover, which, in turn, results in reductions in the quality of the healthcare system as a whole.

Future studies will need to examine longitudinal investigation into burnout patterns, evaluate interventions on stress management, and compare burnout levels across different healthcare systems. Determining the organizational and cultural factors that affect burnout will assist in refining the specific interventions.

To summarize, lessening working stress and burnout of nurses should be of prime importance in the healthcare industry. By paying attention to nurses' well-being, the health sector can improve labor force retention, increase the quality of services provided to patients, and create sustainable places for subsequent generations of nurses.

REFERENCES

1. Chirico, F. (2016). Job stress models for predicting burnout syndrome: A review. *Annali Dell'Istituto Superiore Di Sanita*, 52(3), 443–456. https://doi.org/10.4415/ann_16_03_17
2. Farhady, Y., Ashtari, Z., Khodaei, M. (2009). Relationship between job burnout and work performance in a sample of Iranian mental health staff. *African Journal of Psychiatry*, 12(1). <https://doi.org/10.4314/ajpsy.v12i1.30282>
3. Fiabane, E., Gabanelli, P., Pistorini, C., Gorini, A., Tremoli, E., & La Rovere, M. T. (2021). Psychological and work-related factors associated with emotional exhaustion among healthcare professionals during the COVID-19 outbreak in Italian hospitals. *Nursing & Health Sciences*, 23(3), 670–675. <https://doi.org/10.1111/nhs.12871>
4. Garcia, E., Kundu, I., Kelly, M., Soles, R., Mulder, L., & Talmon, G. A. (2020). The American Society for Clinical Pathology's Job Satisfaction, Well-Being, and Burnout Survey of Laboratory Professionals. *American Journal of Clinical Pathology*, 153(4), 470–486. <https://doi.org/10.1093/ajcp/aqaa008>
5. Glasberg, A. L., Eriksson, S., Norberg, A. (2007). Burnout and stress of consciousness among healthcare personnel. *Journal of Advanced Nursing*, 57(4), 392–403. <https://doi.org/10.1111/j.1365-2648.2007.04111.x>
6. Mattei, A., Fiasca, F., Mazzei, M., Abbossida, V., Bianchini, and V. (2017). Burnout among healthcare workers in L'Aquila: Prevalence and associated factors. *Psychology, Health & Medicine*, 22(10), 1262–1270. <https://doi.org/10.1080/13548506.2017.1327667>
7. Pinikahana, J., & Happell, B. (2004). Stress, burnout, and job satisfaction among rural psychiatric nurses: A Victorian study. *The Australian Journal of Rural Health*, 12(3), 120–125. <https://doi.org/10.1111/j.1440-1854.2004.00572.x>
8. Rogers, J. C., & Dodson, S. C. (1988). Burnout among occupational therapists. *The American Journal of Occupational Therapy*, 42(12), 787–792. <https://doi.org/10.5014/ajot.42.12.787>
9. Sundin, L., Lisspers, J., & Hochwälder, J. (2011). A longitudinal examination of generic and occupation-specific job demands and work-related social support was found to be associated with burnout among nurses in Sweden. *Work*, 38(4), 389–400. <https://doi.org/10.3233/wor-2011-1142>