DOI: 10.7251/QOL2602082H **UDC:** 159.944.4:376-056.34

Original scientific paper

Management Practices and Professional Burnout Among Healthcare Professionals: A Cross-Sectional Study

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Abstract: Professional burnout represents a significant occupational risk among healthcare professionals due to high work demands, emotional strain, and the continuous responsibility associated with patient care. Organizational factors, including management practices and work organization, play an important role in maintaining employees' well-being and preventing burnout. The aim of this study was to examine the role of management practices in the prevention and management of professional burnout among healthcare professionals. A cross-sectional study design was applied. The sample consisted of 30 healthcare professionals employed in secondary and tertiary healthcare institutions. Data were collected using the standardized Job Demands–Resources Questionnaire (Schaufeli, 2015). Descriptive statistical, correlation, and reliability analyses were used to evaluate the collected data. The majority of participants were female (83.2%), with a mean age of 30.83 years. Nurses constituted the largest professional group (56.7%), with an average work experience of 12.2 years. Overall satisfaction with work organization and human resource management was moderate. The mean burnout score was 2.24 ± 0.23, indicating a relatively low level of professional burnout among the respondents. The findings suggest that organizational factors and management practices play an important role in maintaining employee well-being. In particular, supportive interpersonal relations within healthcare teams appear to be associated with lower levels of professional burnout. Strengthening leadership practices, improving work organization, and providing adequate institutional support for healthcare professionals may contribute to the prevention of professional burnout and improvement of healthcare service quality.

Keywords: professional burnout, healthcare professionals, management practices, organizational factors, job demands–resources model

INTRODUCTION

Professional burnout is a psychological syndrome that arises as a consequence of chronic workplace stress that has not been successfully managed (Maslach et al., 2001; Maslach and Leiter, 2016). It is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach and Leiter, 2016; Leiter and Maslach, 2017). Healthcare professionals represent one of the occupational groups most vulnerable to burnout due to the demanding nature of their work, continuous exposure to stressful situations, and responsibility for patient care (Maslach and Leiter, 2016; Dall'Ora et al., 2016).

Healthcare systems worldwide face numerous organizational challenges, including increasing workload, staff shortages, and growing expectations regarding the quality of healthcare services. These factors significantly affect the working conditions of healthcare professionals and may contribute to the development of professional burnout (Aiken et al., 2014; West et al., 2018; World Health Organization, 2019).

Previous research has shown that organizational factors, particularly management practices and leadership styles, play an important role in preventing burnout and promoting employee well-being (Armstrong and Taylor, 2017; Gómez-Mejía et al., 2016; Montgomery et al., 2019).

The Job Demands–Resources (JD-R) model provides an important theoretical framework for understanding burnout in the workplace, suggesting that job demands may increase the risk of burnout, while job resources such as organizational support and effective leadership may reduce these risks and enhance

employee motivation (Schaufeli, 2015; Bakker and Demerouti, 2007; Bakker and Demerouti, 2017; Chirico, 2016).

Despite the growing body of research on professional burnout among healthcare workers, the role of management practices and organizational factors in shaping employee well-being requires further investigation.

Aim of the Study

The aim of this study was to examine the role of management in the prevention and management of professional burnout among healthcare professionals.

MATERIALS AND METHODS

Study design

A cross-sectional study design was applied to examine the relationship between management practices and professional burnout among healthcare professionals.

Participants

The study included 30 healthcare professionals employed in secondary and tertiary healthcare institutions in Belgrade, Serbia, including the Clinical Center of Serbia – Clinic for Endocrinology, Diabetes and Metabolic Diseases and the City Hospital in Belgrade. Participants included nurses, physicians, and other healthcare professionals involved in direct patient care. A convenience sampling approach was used to recruit participants who were available and willing to participate in the study.

Data collection

Data were collected using a standardized questionnaire based on the Job Demands–Resources (JD-R) model (Schaufeli, 2015; Bakker and Demerouti, 2017). The instrument used in this study was the Job Demands–Resources Questionnaire developed by Schaufeli (2015).

The questionnaire consisted of several sections addressing:

- sociodemographic characteristics of participants
- work organization and management practices
- job demands and job resources
- interpersonal relations within the institution
- indicators of professional burnout

Participants completed the questionnaire voluntarily and anonymously. No personal identifying information was collected.

Ethical considerations

The study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Participation in the study was voluntary and anonymous. All respondents were informed about the purpose of the research and provided informed consent prior to completing the questionnaire.

Statistical analysis

Statistical data analysis was performed using the Statistical Package for the Social Sciences (SPSS), version 22. Descriptive statistical methods were applied. Numerical variables were presented as means and standard deviations, while categorical variables were presented as frequencies and percentages. The level of statistical significance was set at $p < 0.05$.

Internal consistency of the instrument was assessed using Cronbach's Alpha coefficient. The obtained Cronbach's Alpha value was α = 0.699, while the standardized Cronbach's Alpha coefficient was α = 0.704 for a total of 49 items. These findings indicate an acceptable level of internal consistency of the instrument, suggesting that the questionnaire items adequately measured the same construct and demonstrated acceptable reliability for further statistical analysis.

RESULTS

A total of 30 healthcare professionals participated in the study.

The sociodemographic characteristics of the respondents are presented in Table 1.

The majority of respondents were female, while male participants represented a smaller proportion of the sample. The mean age of the participants was 30.83 ± 9.34 years, with ages ranging from 24 to 59 years. Nurses constituted the largest professional group, followed by medical technicians, while other professional categories were represented in smaller numbers. The mean work experience of the respondents was 12.21 ± 8.80 years.

Table 1. Sociodemographic characteristics of participants (N = 30)

Variable	Category	n	%
Gender	Female	25	83.2
	Male	5	16.8
Age (years)	Mean ± SD	30.83 ± 9.34	
	Min–Max	24–59	
Work position	Nurse	17	56.7
	Medical technician	5	16.7
	Senior nurse	2	6.7
	Personal assistant	2	6.7
	Head nurse	1	3.3
	Teacher	1	3.3
	Other	2	6.7
Marital status	Married	20	67.9
	Single	7	25.0
	Divorced	3	7.1
Work experience	Mean ± SD	12.21 ± 8.80	
	Min–Max	3–37	

Two questionnaires contained incomplete responses in sections related to organizational climate and were excluded from domain-specific analyses; therefore, the number of valid responses for Tables 2–4 was N = 28.

The evaluation of satisfaction with work organization by management is presented in **Table 2**. Overall, respondents reported moderate levels of satisfaction with work organization and management practices. The highest mean value was observed for the statement indicating that the institution is highly formalized and structured, while relatively high scores were also recorded for the perception that supervisors expect adherence to rules.

Table 2. Work organization and management practices

Statement	N	Min	Max	Mean	SD
The institution represents a supportive working environment.	28	1	5	3.11	1.10
The institution is a dynamic and entrepreneurial place.	28	1	5	2.61	1.10
The institution is highly formalized and structured.	28	1	5	3.46	1.17
The institution is strongly production-oriented.	28	1	5	2.54	1.17
Supervisors are warm and caring mentors.	28	1	5	3.04	1.26
Supervisors encourage innovation.	28	1	5	2.81	1.41
Supervisors expect adherence to rules.	28	1	5	3.29	1.30

Results related to satisfaction with human resource management and incentives provided by leadership are presented in **Table 3**. Respondents generally reported moderate perceptions of management practices. The highest mean score was observed for the statement that the institution emphasizes human resources, followed by recognition of the importance of initiative in professional work. Lower scores were observed for the perception that rewards are distributed equally among employees.

Table 3. Mean scores of human resource management and incentive practices

Statement	N	Min	Max	Mean	SD
The institution emphasizes human resources.	28	1	5	3.61	1.19
The institution emphasizes growth.	28	1	5	3.39	1.19
The institution emphasizes stability.	28	1	5	3.25	1.19
The institution emphasizes competitiveness.	28	1	5	3.25	1.47
Rewards distributed equally.	28	1	5	2.11	1.25
Rewards based on initiative.	28	1	5	3.59	1.18

The results concerning interpersonal relations among healthcare professionals are presented in **Table 4**. Respondents generally reported positive perceptions of collegial relationships within their institutions. The highest mean value was recorded for the statement that employees respect one another, while teamwork during periods of increased workload was also highly rated.

Table 4. Satisfaction with interpersonal relations in the institution

Statement	N	Min	Max	Mean	SD
Employees support one another	28	1	5	3.29	0.81
Employees work as a team	28	1	5	3.61	0.83
Employees respect one another	28	1	5	3.70	0.91
Employees help other departments	28	1	5	3.32	1.24

To provide an overall assessment of organizational factors, mean scores of the main organizational domains were calculated and are presented in **Table 5.** Among the analyzed domains, the highest level of satisfaction was observed in interpersonal relations, while satisfaction with human resource management practices and work organization showed slightly lower values.

Table 5. Mean scores of organizational domains

Domain	Mean score
Satisfaction with work organization	2.85
Satisfaction with HR management	2.93
Satisfaction with interpersonal relations	3.56
Overall organizational domain score	3.11

The level of professional burnout among healthcare professionals was also assessed. The results presented in Table 6 indicate that the mean burnout score was 2.24 ± 0.23, suggesting a relatively low level of burnout symptoms among the participants. Correlation analysis was conducted to examine the relationship between organizational factors and professional burnout.

A statistically significant negative correlation was observed between interpersonal relations and professional burnout ($r = -0.412$, $p = 0.040$), indicating that better interpersonal relations within healthcare teams are associated with lower levels of burnout.

Table 6. Professional burnout and correlations with organizational domains

Variable	Value
Burnout (Mean ± SD)	2.24 ± 0.23
Correlation: work organization – burnout	$r = 0.009$, $p = 0.968$
Correlation: HR management – burnout	$r = 0.068$, $p = 0.771$
Correlation: interpersonal relations – burnout	$r = -0.412$, $p = 0.040$*

*Statistically significant at $p < 0.05$

DISCUSSION

Professional burnout represents one of the most significant challenges in modern healthcare systems due to the high emotional demands, responsibility for patient care, and organizational pressures faced by healthcare professionals (Maslach and Leiter, 2016; Schaufeli, 2015). Understanding the role of organizational factors in the development or prevention of burnout is therefore essential for improving employee well-being and maintaining the quality of healthcare services.

The findings of this study indicate that organizational characteristics and management practices play an important role in shaping the working environment of healthcare professionals. Although respondents generally perceived the organizational structure as relatively stable and formalized, the overall evaluation of work organization and management practices remained at moderate levels of satisfaction, as reflected in the mean domain scores. Such findings may suggest that employees perceive the organizational system as functional, but not necessarily strongly supportive or motivating. Previous research has shown that organizational climate and leadership style significantly influence employee well-being, work engagement, and job satisfaction among healthcare professionals (Bakker and Demerouti, 2017; West et al., 2018). In this context, effective management practices may represent an important resource for healthcare employees, particularly in demanding clinical environments.

Human resource management practices represent an important component of organizational functioning in healthcare institutions. In the present study, respondents recognized the importance of human resources, staff cohesion, and professional initiative within their institutions. These findings suggest that employees value working environments in which professional development, collaboration, and innovation are encouraged. At the same time, perceptions related to fairness in reward distribution appeared less

favorable. Similar challenges have been described in previous studies, which suggest that limited organizational resources and rigid administrative structures may negatively affect employees' perceptions of fairness and recognition within healthcare institutions (Armstrong and Taylor, 2017; Montgomery et al., 2019). These findings highlight the importance of transparent management practices and equitable reward systems in strengthening employee motivation and organizational commitment.

Interpersonal relations within the workplace emerged as the most positively perceived aspect of the organizational environment. Supportive relationships among colleagues, teamwork, and mutual respect represent important elements of a healthy work climate in healthcare institutions and may act as protective factors against professional burnout. Previous studies have consistently demonstrated that strong collegial support can mitigate work-related stress and contribute to higher levels of job satisfaction among healthcare professionals (Adams and Bond, 2000; Bakker and Demerouti, 2017). In complex healthcare settings where multidisciplinary cooperation is essential, positive interpersonal relationships may function as protective factors against professional exhaustion.

Another important finding of this study relates to the low level of professional burnout observed among respondents.

The relatively low burnout score observed in this study ($M = 2.24 \pm 0.23$) should also be interpreted cautiously. Several factors may explain these findings. First, supportive interpersonal relations within healthcare teams may have acted as an important protective factor against emotional exhaustion and occupational stress. Second, the relatively small sample size and convenience sampling approach may have influenced the representativeness of the results. Additionally, participants may have been inclined toward socially desirable responses, particularly considering the sensitive nature of questions related to occupational stress and burnout. Institutional context and specific organizational characteristics of the included healthcare facilities may also have contributed to the lower reported burnout levels.

These findings may suggest that despite moderate satisfaction with certain organizational aspects, employees maintain a degree of resilience within their work environment. One possible explanation may be the presence of supportive interpersonal relations within teams, which can buffer the negative effects of organizational stressors. Social support within healthcare teams has been widely recognized in the literature as a key factor contributing to coping with occupational stress and preventing emotional exhaustion (Schaufeli, 2015; Greenglass, Burke and Fiksenbaum, 2001; Hall et al., 2016; Morgantini et al., 2020).

From a theoretical perspective, these findings may also be interpreted within the framework of the Job Demands–Resources (JD-R) model, which suggests that job demands increase the risk of burnout, whereas job resources such as organizational support, teamwork, and effective leadership may reduce stress and promote work engagement (Bakker and Demerouti, 2017). In this context, supportive interpersonal relationships and constructive management practices may function as important organizational resources that help healthcare professionals cope with demanding work conditions.

The findings of this study may also be interpreted in line with the World Health Organization (WHO) perspective, which recognizes burnout as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed (World Health Organization, 2019). According to the ICD-11 classification, burnout is specifically associated with the occupational context and should not be applied to other areas of life. In this regard, organizational responsibility becomes particularly important, emphasizing the need for healthcare institutions to implement preventive strategies aimed at improving working conditions, organizational support, and employee well-being.

Leadership style represents an important organizational factor associated with employee well-being and burnout prevention. Previous studies have shown that transformational and supportive leadership styles

may positively influence employee motivation, resilience, and job satisfaction, while simultaneously reducing emotional exhaustion and occupational stress (West et al., 2020; Bakker, Demerouti and Sanz-Vergel, 2014). Leaders who encourage open communication, teamwork, employee participation in decision-making, and professional recognition contribute to the development of healthier work environments and stronger organizational support systems within healthcare institutions.

Organizational culture also plays a significant role in shaping occupational well-being among healthcare professionals. Supportive organizational cultures characterized by trust, mutual respect, effective communication, teamwork, and employee-centered management approaches may contribute to lower levels of professional burnout. In contrast, highly formalized organizational climates with limited communication and reduced institutional support may negatively affect employee satisfaction and psychological well-being. Creating positive organizational climates within healthcare institutions should therefore represent an important strategic priority for healthcare management (De Hert, 2020).

Furthermore, the observed relationship between interpersonal relations and burnout highlights the importance of collaborative workplace culture in healthcare institutions. Positive communication, teamwork, and mutual professional respect may strengthen employees' psychological resilience and contribute to maintaining professional engagement even in demanding work environments.

Despite these findings, the study has several limitations that should be considered when interpreting the results. The relatively small sample size (N = 30) limits the generalizability of the findings to broader populations of healthcare professionals. Additionally, the use of convenience sampling may have introduced selection bias, as participation depended on respondents' availability and willingness to participate in the study. The cross-sectional study design also limits the ability to establish causal relationships between organizational factors and professional burnout. Furthermore, self-reported data may be influenced by socially desirable responses and subjective perceptions of workplace conditions. Future research should include larger multicenter samples, longitudinal study designs, and more advanced statistical methods in order to provide a more comprehensive understanding of the relationship between organizational factors, management practices, and professional burnout among healthcare professionals.

Overall, the findings of this study emphasize the importance of organizational climate and leadership practices for maintaining employee well-being in healthcare institutions. Strengthening supportive management approaches, improving communication within teams, and ensuring fair recognition of employees' contributions may represent important strategies for preventing professional burnout among healthcare professionals.

CONCLUSION

Professional burnout represents an important challenge for healthcare systems due to the demanding nature of healthcare work and increasing organizational pressures faced by healthcare professionals. The findings of this study highlight the significant role of organizational factors, particularly management practices and interpersonal relations within healthcare teams, in shaping employees' work experiences and psychological well-being.

The results indicate that supportive leadership, effective work organization, and positive interpersonal relationships among colleagues may serve as important protective factors against professional burnout. These findings highlight the importance of interpersonal relationships as a key organizational resource that may reduce the risk of professional burnout among healthcare professionals. Furthermore, the results contribute to the existing body of knowledge on occupational health in healthcare settings by emphasizing the importance of organizational climate and management approaches in maintaining employee well-being.

From a practical perspective, the results of this study may support healthcare managers and policymakers in developing strategies aimed at improving work organization, strengthening teamwork, and enhancing institutional support for healthcare professionals. The implementation of such organizational strategies may contribute to the prevention of professional burnout, improved job satisfaction, and the overall quality of healthcare services.

Healthcare managers and decision-makers should consider implementing organizational interventions focused on strengthening supportive leadership approaches, improving communication within healthcare teams, promoting employee participation in organizational processes, and ensuring fair recognition of employees' contributions. Furthermore, continuous mental health support programs, stress management education, and institutional strategies aimed at improving working conditions may contribute to reducing professional burnout and enhancing the quality and sustainability of healthcare services.

ACKNOWLEDGEMENTS
The authors would like to thank all healthcare professionals who participated in this study.

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Recived: March 30, 2026
Revised: June 4, 2026
Accepted: June 5, 2026