



Assessment of Occupational Stress Among Healthcare Personnel: A Cross-Sectional Study at Maiwand Teaching Hospital, Kabul, Afghanistan

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Abstract. Occupational stress is a critical concern among healthcare personnel, as it directly affects both their psychological well-being and the overall quality of patient care. Excessive stress may lead to burnout, decreased job performance, and adverse emotional outcomes. Understanding the prevalence and determinants of occupational stress is therefore essential for developing effective intervention strategies. This study aimed to assess the level of occupational stress among healthcare personnel at Maiwand Teaching Hospital in 1404 H.S. (2025 Gregorian calendar) and examine variations across demographic and professional characteristics, including gender, age, marital status, department, education level, and years of experience. A descriptive cross-sectional design was adopted, and a total of 174 healthcare personnel were selected through simple random sampling, with 168 completing the standardized HSE Job Stress Questionnaire. Data were analyzed using SPSS version 26, and findings were presented through descriptive statistics and graphical illustrations. The results revealed that 78% of participants experienced moderate stress, 20.8% reported low stress, and only 1.2% experienced high stress. Higher stress levels were more common among males, younger staff, nurses, and personnel in high-intensity departments, particularly the ICU. While moderate stress was also observed among staff in the Dermatology Department, the number of respondents reporting high stress in this department was minimal (0.6%), suggesting that workload and patient volume may contribute to moderate but not severe stress levels. Marital status, educational attainment, and professional experience also influenced stress distribution patterns. In conclusion, occupational stress remains a prevalent issue among healthcare personnel, with the majority experiencing moderate stress. Targeted interventions – such as stress management training, improved workload distribution, and enhanced professional support systems – are recommended to foster a healthier work environment and improve both staff well-being and healthcare delivery quality.

Keywords: Occupational stress, healthcare personnel, HSE questionnaire, maiwand teaching hospital, stress management

1. Introduction

Occupational stress among healthcare workers has emerged as a critical concern globally, affecting not only the well-being of medical personnel but also the quality of healthcare delivery. Stress in healthcare settings can arise from heavy workloads, long working hours, high responsibility, and emotional demands associated with patient care (Feng et al., 2022; Saha et al., 2011). The prevalence of occupational stress is particularly significant in developing countries, where healthcare systems often face resource constraints,

staff shortages, and challenging working conditions (Mengist et al., 2021; Kakemam et al., 2019).

Several studies have highlighted the widespread nature of stress among healthcare personnel and its impact on professional performance. For instance, Muidh et al. (2024) reported that 85.9% of healthcare workers in Saudi Arabia experienced moderate levels of stress, with female gender, nursing profession, and employment in critical departments identified as significant risk factors. Similarly, in China, a national cross-sectional study among general practitioners indicated that long working hours, additional shifts, and limited career development opportunities were strongly associated with increased occupational stress (Feng et al., 2022). In Ethiopia, a systematic review and meta-analysis revealed that approximately 53% of healthcare workers faced job-related stress, with younger, female, and less experienced staff being more vulnerable (Mengist et al., 2021).

Occupational stress not only affects healthcare personnel's mental and physical health but also reduces their job performance and satisfaction. In Bahrain, high levels of stress were inversely correlated with job performance, emphasizing the need for organizational interventions (Alafoo et al., 2024). Similarly, studies conducted in Pakistan, Iran, and Saudi Arabia reported that unclear job roles, inadequate management practices, insufficient staffing, and lack of organizational support significantly contributed to elevated stress levels among healthcare workers (Arif et al., 2020; Kakemam et al., 2019; AlMuammar et al., 2022). Moreover, the COVID-19 pandemic exacerbated stress levels across healthcare systems worldwide, with frontline workers experiencing anxiety, fear of infection, and increased workload, leading to higher rates of burnout (Prasad et al., 2021; Rink et al., 2023).

Given the multifactorial nature of occupational stress and its adverse consequences on both staff well-being and patient care, continuous assessment and evidence-based interventions are essential. The present study aims to assess the levels of occupational stress among healthcare personnel at Maiwand Teaching Hospital in Kabul, Afghanistan, and to explore the associations of stress with demographic and occupational factors. This research contributes to the understanding of occupational stress in the Afghan healthcare context, providing insights for targeted strategies to improve staff mental health and organizational efficiency.

Occupational stress among healthcare workers has emerged as a significant global concern, influencing both the well-being of employees and the quality of patient care (Alafoo et al., 2024; AlMuammar et al., 2022). Healthcare professionals are particularly vulnerable to stress due to the demanding nature of their work, long hours, high patient loads, and the emotional intensity associated with patient care (Arif et al., 2020; Kakemam et al., 2019). Stress in the healthcare environment has been linked to decreased job performance, burnout, and increased turnover intentions, highlighting the necessity for systematic assessment and management (Dehghani Tafti et al., 2020; Mengist et al., 2021).

Several studies have emphasized the importance of valid and reliable tools for measuring occupational stress. The Health and Safety Executive (HSE) Job Stress Questionnaire is widely recognized for its psychometric properties, offering robust reliability and validity for assessing stress levels among healthcare personnel (A. Marzabadi, 2011). This instrument has been effectively employed in multiple contexts to identify stressors and categorize stress levels into low, moderate, and high, providing a standardized approach for comparative research.

Research conducted in different regions has consistently demonstrated that stress levels among healthcare workers vary according to demographic and occupational factors. For example, studies in Bahrain and Saudi Arabia have shown that gender, age, professional role, and experience significantly influence stress prevalence and intensity (Muidh et al., 2024; Alafoo et al., 2024; AlMuammar et al., 2022). In addition, studies from Iran and China reveal that organizational environment, workload, and emotional demands are major determinants of occupational stress (Farrokhi et al., 2022; Feng et al., 2022). Notably, nurses often report higher stress levels than physicians due to continuous patient interaction and complex responsibilities (Et.al, 2009; Rink et al., 2023).

Furthermore, systematic reviews highlight that unmanaged stress can result in both physical and psychological consequences, including anxiety, depression, cardiovascular disorders, and impaired cognitive functioning, which may ultimately affect patient safety (Prasad et al., 2021; Stress, 2022). Research also underscores the importance of stress management interventions, such as organizational support, counseling, workload adjustments, and mindfulness practices, to enhance resilience and job satisfaction (Safaeian et al., 2019; Saha et al., 2011).

Overall, the literature suggests that occupational stress among healthcare workers is multifaceted, influenced by personal, professional, and organizational factors. Understanding these determinants is crucial for designing effective interventions and improving workplace well-being, particularly in high-pressure environments such as hospitals (Between et al., 2023; Arif et al., 2020).

3. Methods

3.1. Research Design

This study employed a descriptive cross-sectional research design, which is appropriate for examining the prevalence, distribution, and determinants of occupational stress among healthcare professionals at a specific point in time. The cross-sectional approach enables researchers to collect data on multiple variables—such as stress levels, demographic characteristics, and work-related factors—simultaneously, without manipulating any conditions. This design has been widely used in occupational health research due to its efficiency in identifying trends and associations within large and diverse populations (Alafoo et al., 2024; AlMuammar et al., 2022). The principal aim of this design was to describe the existing stress patterns among hospital staff and highlight factors contributing to work-related stress in a real-world healthcare environment.

3.2. Study Setting

The study was conducted at Maiwand Teaching Hospital, situated on Maiwand Road, Kabul, Afghanistan. This institution serves as one of the country's major teaching and referral hospitals, delivering specialized healthcare services across various disciplines, including internal medicine, surgery, pediatrics, dermatology, and intensive care. Owing to its diverse range of medical departments and multidisciplinary staff, the hospital provided an ideal setting to capture a broad spectrum of occupational stress experiences among healthcare professionals (Arif et al., 2020; Feng et al., 2022). Conducting the study in this environment ensured that the findings reflected the complex dynamics and workload variations characteristic of large tertiary healthcare institutions in Afghanistan.

3.3. Study Period

Data collection was carried out during the first half of the year 1404 AH (equivalent to 2025 in the Gregorian calendar). This defined period allowed for consistency in data gathering, reducing the potential influence of seasonal or organizational changes that might affect participants' stress levels.

3.4. Population and Sample

The target population consisted of all healthcare personnel working at Maiwand Teaching Hospital, encompassing doctors, nurses, paramedical staff, and administrative personnel. The sample was selected using simple random sampling, ensuring that each staff member had an equal chance of inclusion, which minimizes selection bias and enhances representativeness (Dehghani Tafti et al., 2020). Using the Epi Info statistical program, the sample size was calculated as 174 participants, of whom 168 (96.5%) returned completed questionnaires.

Population survey or descriptive study
For simple random sampling, leave design effect and clusters equal to 1.

Population size:	277	
Expected frequency:	50 %	
Acceptable Margin of Error:	5 %	
Design effect:	1.0	
Clusters:	1	

Confidence Level	Cluster Size	Total Sample
80%	103	103
90%	137	137
95%	161	161
97%	174	174
99%	195	195
99.9%	221	221
99.99%	234	234

Figure 1. Sample size calculation table for a population survey

This table presents the required sample sizes for a descriptive study of a population (N=27.7 million), given an expected frequency of 50% and a 5% margin of error. The total sample size needed increases with the desired confidence level, ranging from 103 (80% confidence) to 234 (99.99% confidence) for a simple random sampling design.

3.5. Data Collection Instrument

Data were collected using the standardized HSE Job Stress Questionnaire, which consists of 35 items scored on a 5-point Likert scale. Total scores range from 35 to 175, with scores of 35–82 indicating high stress, 83–129 moderate stress, and 130–175 low stress. The instrument has demonstrated strong reliability, with a Cronbach's alpha exceeding 0.7 (A. Marzabadi, 2011), ensuring both the consistency and validity of the measurements.

3.6. Data Analysis

All collected data were entered and analyzed using SPSS version 26. Descriptive statistics, including frequency distributions, percentages, means, and standard deviations, were used to summarize the data. Graphs and charts were generated using Microsoft Excel to visualize key findings, enabling clear interpretation of demographic distributions and stress levels across professional categories. This analytical approach provided a comprehensive

overview of occupational stress trends and facilitated comparison among subgroups such as gender, age, marital status, education level, and department.

3.7. Ethical Considerations

Ethical standards were strictly adhered to. Participants provided written informed consent, and confidentiality of all information was ensured. Participation was voluntary, and respondents could withdraw at any stage without repercussions. The study was approved by the Research Ethics Committee of the Ministry of Public Health of Afghanistan, and no physical or psychological harm occurred during the research process (Farrokhi et al., 2022; Muidh et al., 2024).

4. Results and Discussion

This study aimed to assess occupational stress among healthcare personnel at Maiwand Teaching Hospital in 1404 AH (2025 Gregorian calendar). Data were collected using a standardized questionnaire distributed among the hospital staff. The results are described according to gender, age, marital status, work experience, department, and education level. After analysis, the following results were obtained.

A total of 168 staff members from different departments of Maiwand Teaching Hospital participated. Regarding gender, participants were classified as male and female. Among them, 119 (70.8%) were male, and 49 (29.2%) were female (Table 4.1).

Gender Distribution of Healthcare Personnel

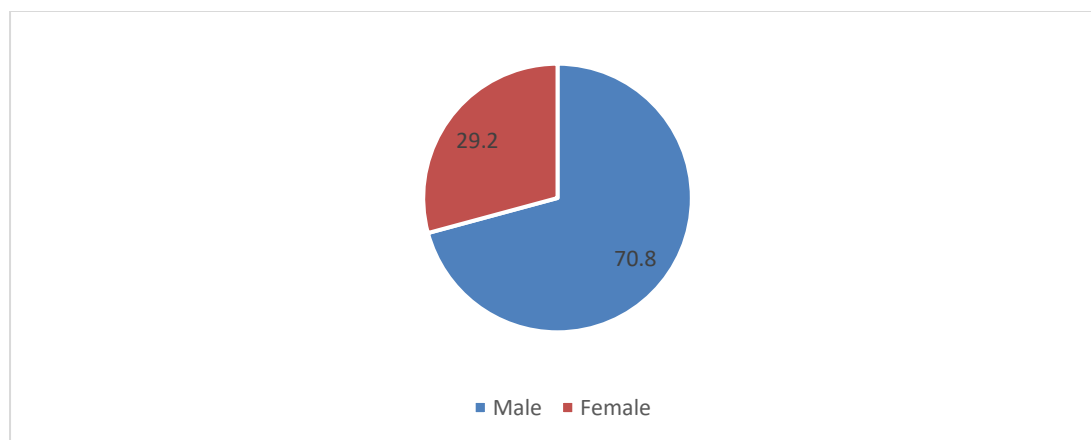


Figure 1. Gender Distribution of Healthcare Personnel

Figure 1 illustrates the gender distribution of healthcare personnel at Maiwand Teaching Hospital. Among the 168 participants, a majority of 119 (70.8%) were male, while 49 (29.2%) were female. This indicates that the hospital workforce is heavily male-dominated, which may have implications for workplace dynamics, division of responsibilities, and stress levels. Research suggests that gender differences can shape the perception and management of occupational stress, with female staff often facing unique challenges such as balancing professional and family responsibilities. Understanding this distribution is therefore vital for developing gender-sensitive strategies to reduce stress among healthcare workers.

4.1. Age Distribution of Participants

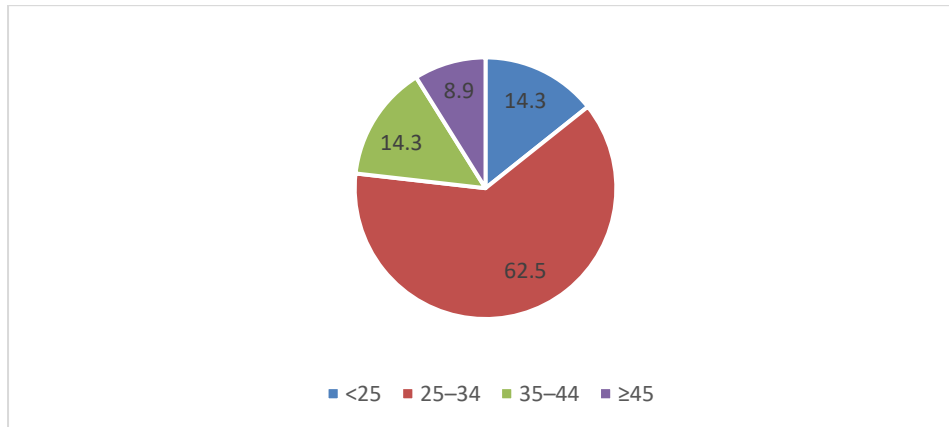


Figure 2. Age Distribution of Healthcare Personnel

Figure 2 presents the age distribution of healthcare personnel at Maiwand Teaching Hospital. The largest group of participants falls within the 25–34 age range, comprising 105 individuals (62.5%), followed by both the <25 and 35–44 age groups, each with 24 participants (14.3%). The smallest group consists of those aged 45 and above, with only 15 participants (8.9%). This pattern demonstrates that the workforce is relatively young, with the majority being early to mid-career professionals. A younger workforce may experience stress differently, often due to workload, lack of experience, or career pressures, compared to older, more experienced staff.

4.2. Marital Status of Healthcare Personnel

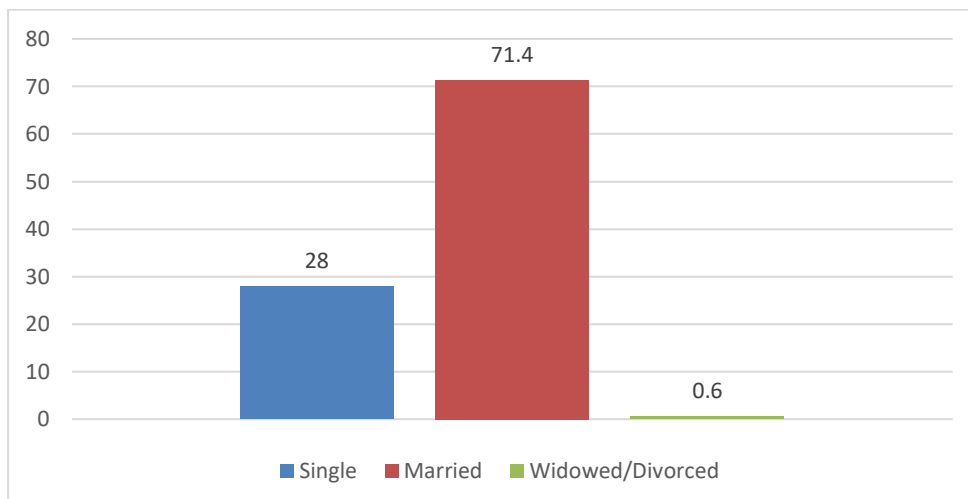


Figure 3. Marital Status Distribution of Healthcare Personnel

Figure 3 illustrates the marital status distribution among healthcare personnel at Maiwand Teaching Hospital. The majority of participants were married, accounting for 120 individuals (71.4%), while 47 participants (28%) were single. Only one participant (0.6%) was widowed or divorced, representing the smallest category. This distribution suggests that most of the hospital staff are married, which could have implications for their stress levels, as marital responsibilities may interact with professional demands. On the other hand, single

participants may face different forms of occupational stress, such as limited social support or work–life balance challenges.

4.3. Distribution of Participants by Department

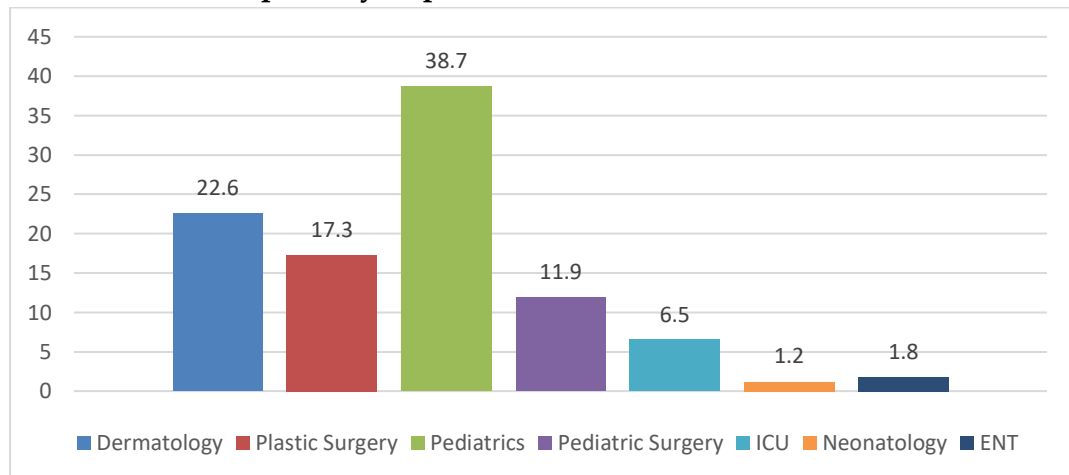


Figure 4. Distribution of Healthcare Personnel by Department

Figure 4 presents the distribution of healthcare personnel across different departments at Maiwand Teaching Hospital. The largest proportion of staff, 65 individuals (38.7%), worked in the Pediatrics Department, reflecting its high demand for medical personnel. Dermatology was the second most represented department with 38 staff members (22.6%), followed by Plastic Surgery with 29 individuals (17.3%). Pediatric Surgery accounted for 20 participants (11.9%), while 11 staff (6.5%) were assigned to the ICU. Smaller departments included ENT with three staff (1.8%) and Neonatology with only two staff members (1.2%). This distribution highlights varying workloads and staffing patterns across specialties.

4.4. Distribution of Participants by Work Experience

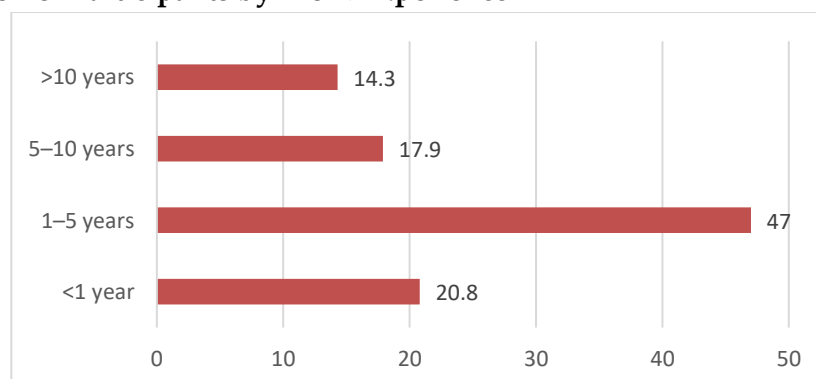


Figure 5. Distribution of Healthcare Personnel by Work Experience

Figure 5 illustrates the distribution of healthcare personnel by their years of work experience. The largest group comprised those with 1–5 years of experience, representing 79 individuals (47%), suggesting that a significant portion of the workforce is relatively early in their careers. Participants with less than one year of experience formed the second largest group with 35 individuals (20.8%). Meanwhile, 30 staff members (17.9%) had 5–10 years of experience, and 24 participants (14.3%) had more than 10 years. This distribution indicates a

youthful workforce with limited long-term experience, which may influence stress management capabilities.

4.5. Education Level of Participants

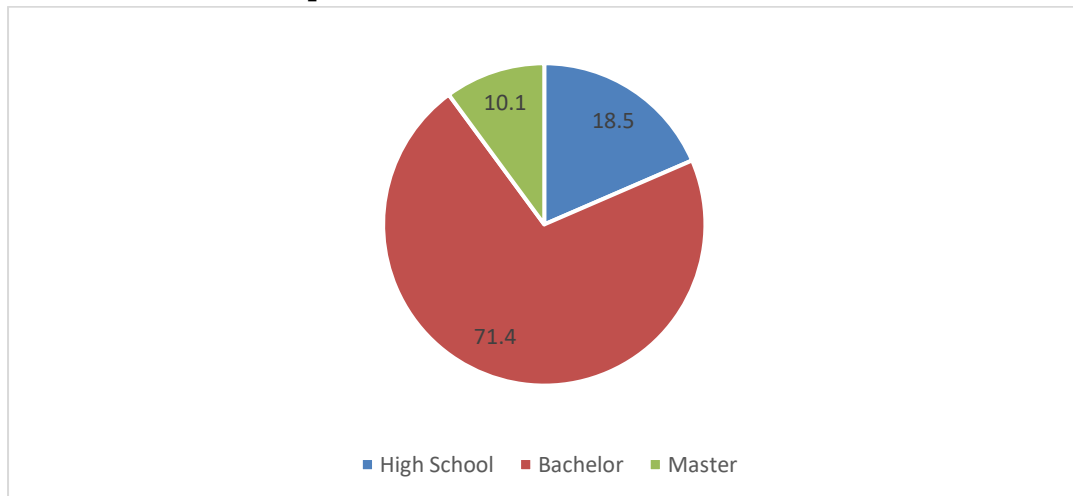


Figure 6. Distribution of Healthcare Personnel by Education Level

Figure 6 illustrates the distribution of healthcare personnel based on their educational attainment. The majority of participants held a bachelor's degree (120 individuals, 71.4%), reflecting the standard qualification for most medical and paramedical roles in the hospital. A smaller proportion of respondents had completed only high school education (31 individuals, 18.5%), which may indicate the presence of support staff or technicians within the workforce. Finally, 17 participants (10.1%) had achieved a master's degree, representing advanced qualifications and specialized expertise. This distribution highlights a workforce dominated by bachelor-level professionals with relatively fewer individuals holding postgraduate qualifications.

4.6. Overall Occupational Stress Levels

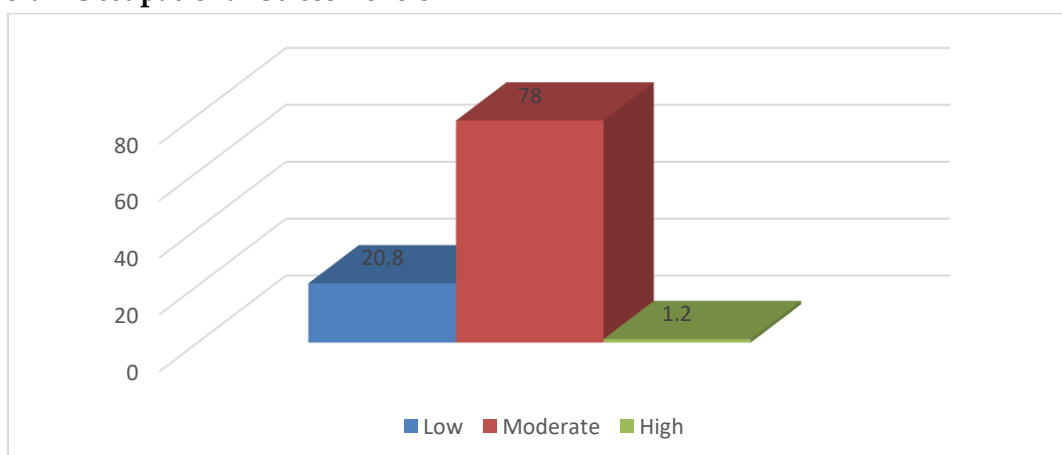


Figure 7. Distribution of Occupational Stress Levels among Healthcare Personnel

Figure 7 demonstrates the distribution of occupational stress levels among healthcare personnel at Maiwand Teaching Hospital. The majority of respondents reported experiencing

moderate stress (131 participants, 78.0%), indicating that work-related pressures are common but not extreme for most staff. A smaller proportion, 35 participants (20.8%), experienced low stress, suggesting effective coping mechanisms or less demanding roles. Alarmingly, only 2 participants (1.2%) reported high stress levels, which, while minimal, still represents a significant concern due to the potential impact on well-being and job performance. Overall, the findings reveal that occupational stress is prevalent, with moderate levels dominating.

4.7. Stress Level by Gender

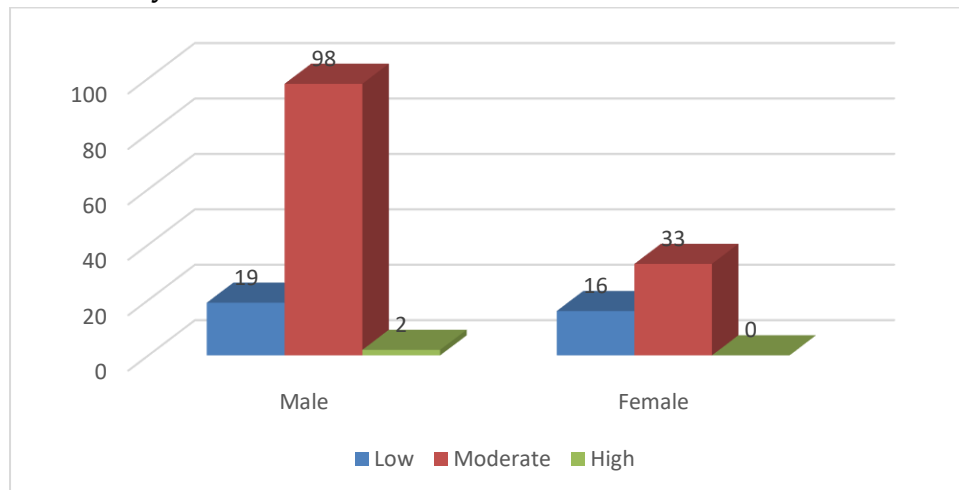


Figure 8. Occupational Stress Levels by Gender

Figure 8 illustrates the relationship between gender and occupational stress among healthcare personnel. The majority of male participants (98; 58.3%) reported experiencing moderate stress, while 19 (11.3%) reported low stress, and only 2 (1.2%) reported high stress. Among female participants, most also reported moderate stress (33; 19.6%), followed by low stress (16; 9.5%), with no cases of high stress recorded. This pattern suggests that while both genders predominantly experience moderate stress, males show a slightly higher incidence of severe stress, whereas females appear less likely to reach extreme stress levels.

4.8. Stress Level by Age

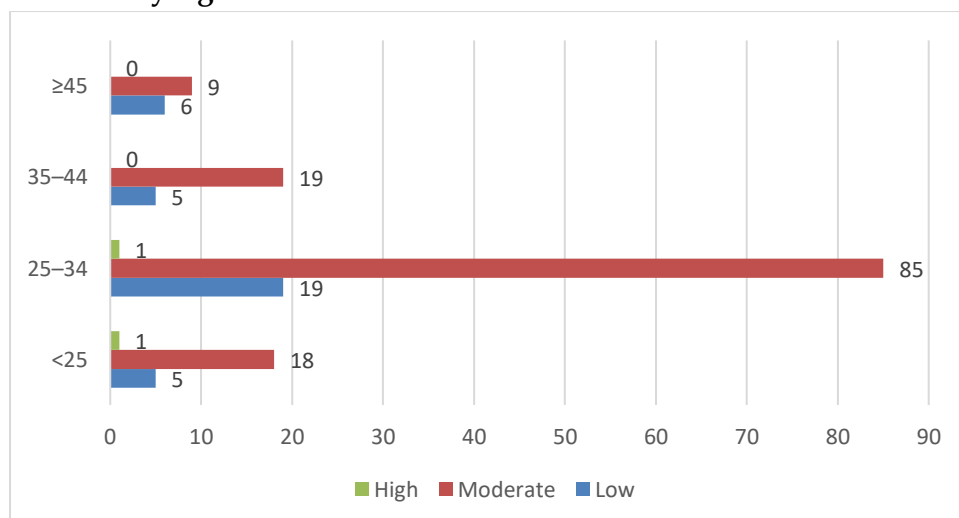


Figure 9. Occupational Stress Levels by Age Group

Figure 9 presents the distribution of occupational stress across different age groups. The 25–34 age group reported the highest proportion of moderate stress (85; 50.6%), followed by the <25 group (18; 10.7%) and the 35–44 group (19; 11.3%). High stress was observed in only two participants (1.2%), one from the <25 group and one from the 25–34 group. Low stress was more evenly distributed, with 6 cases (3.6%) among those aged ≥45 and 5 cases (3.0%) each in the <25 and 35–44 groups. Overall, moderate stress dominated all age categories, particularly in younger healthcare personnel.

4.9. Stress Level by Marital Status

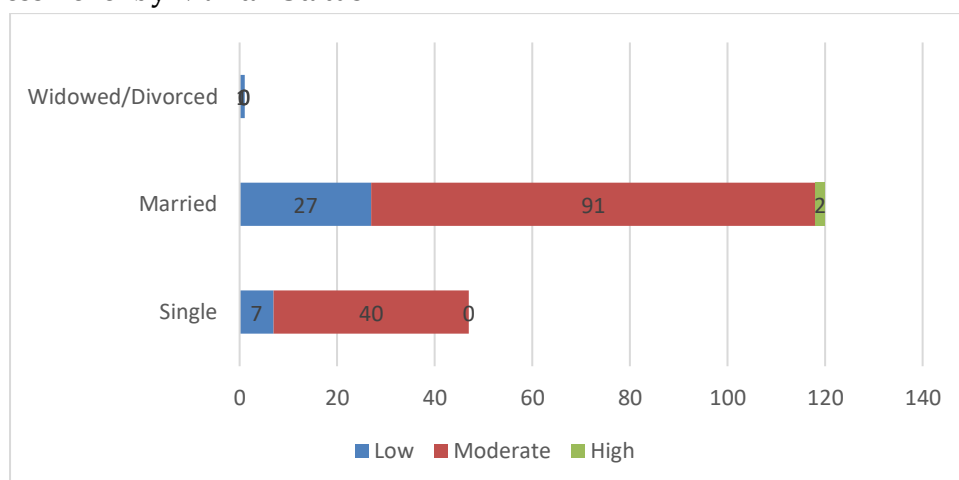


Figure 10. Distribution of Stress Levels by Marital Status

Figure 10 illustrates the relationship between marital status and occupational stress among healthcare personnel at Maiwand Teaching Hospital. Among the participants, married staff constituted the majority, with 120 individuals (71.4%), and most of them (91, 54.2%) experienced moderate stress, while only 2 (1.2%) reported high stress levels. Single participants accounted for 47 (28%) of the sample, predominantly experiencing moderate stress (40, 23.8%) and low stress (7, 4.2%), with none reporting high stress. Only one participant (0.6%) was widowed or divorced and reported low stress. These results suggest marital status may influence stress distribution, with married personnel slightly more affected by moderate stress.

4.10. Stress Level by Profession

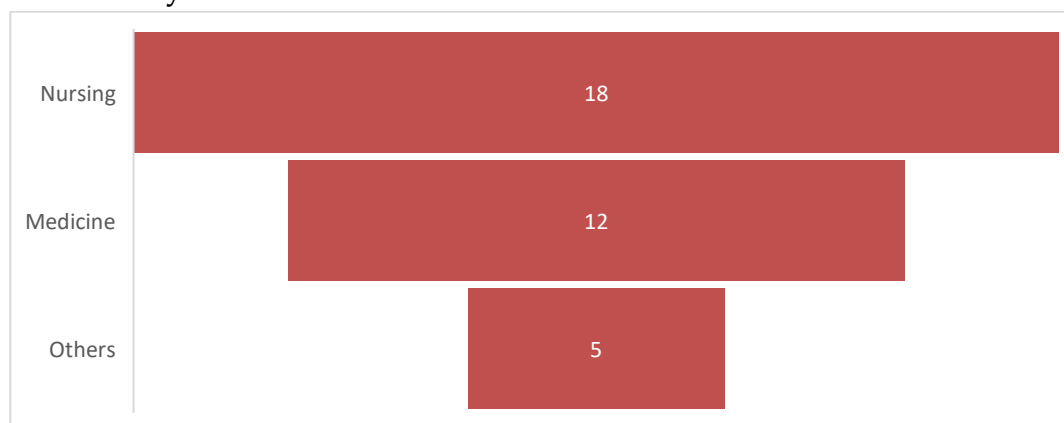


Figure 11. Distribution of Stress Levels by Profession

Figure 11 presents the distribution of occupational stress among healthcare staff according to their professional role at Maiwand Teaching Hospital. Nurses, representing a significant portion of the workforce, exhibited a wide range of stress levels: 33 (19.6%) experienced moderate stress, 18 (10.7%) low stress, and 2 (1.2%) high stress. Medical doctors predominantly experienced moderate stress, with 81 individuals (48.2%) affected, and 12 (7.1%) reporting low stress, while none reported high stress. Other professions, including allied health staff, showed lower stress levels overall, with 17 (10.1%) moderate and 5 (3%) low stress, and no instances of high stress. This suggests that nurses are slightly more vulnerable to high stress compared to other professional groups.

4.11. Stress Level by Department

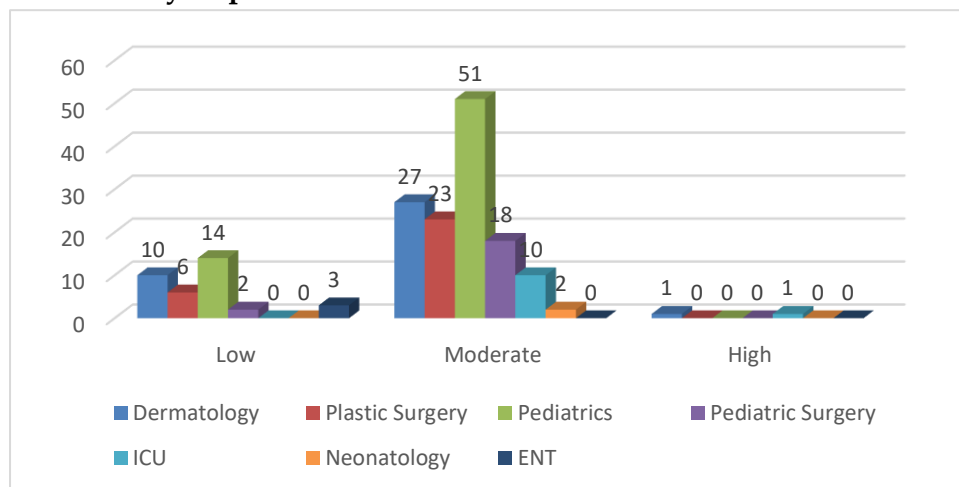


Figure 12. Distribution of Stress Levels by Department

Figure 12 illustrates the occupational stress levels among healthcare personnel based on their department at Maiwand Teaching Hospital. In Dermatology, 27 staff members (16.1%) experienced moderate stress, 10 (6%) low stress, and 1 (0.6%) high stress. Plastic Surgery staff mainly reported moderate stress (23; 13.7%) with 6 (3.6%) low stress and no high stress cases. Pediatrics, the largest department, had 51 (30.4%) moderate and 14 (8.3%) low stress, with no high stress reported. Pediatric Surgery staff showed moderate stress in 18 (10.7%) and low stress in 2 (1.2%). ICU had 10 (6%) moderate stress and 1 (0.6%) high stress. Neonatology and ENT showed minimal stress levels, reflecting departmental differences in stress exposure and workload intensity.

4.12. Stress Level by Education

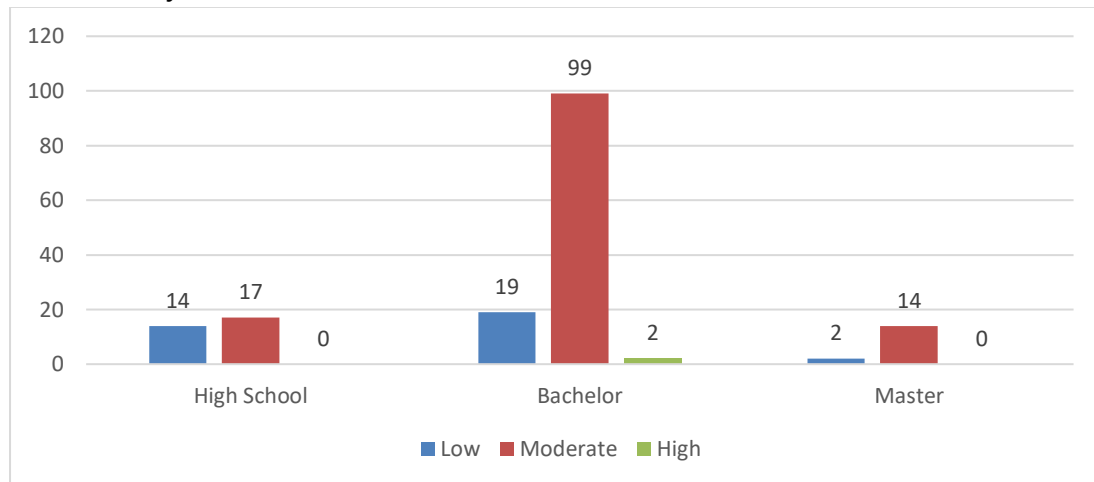


Figure 13. Distribution of Stress Levels by Education Level

Figure 13 presents the distribution of occupational stress among healthcare personnel according to their education level. Among participants with a high school education, 17 (10.1%) experienced moderate stress, 14 (8.3%) low stress, and none reported high stress. Bachelor's degree holders constituted the largest group, with 99 (58.9%) reporting moderate stress, 19 (11.3%) low stress, and 2 (1.2%) high stress. Participants with a master's degree mostly reported moderate stress (14; 8.3%) and low stress (2; 1.2%), with no high stress cases. These results indicate that stress prevalence is higher among staff with bachelor's education, possibly reflecting greater responsibilities and workload associated with their roles.

4.13. Stress Level by Work Experience

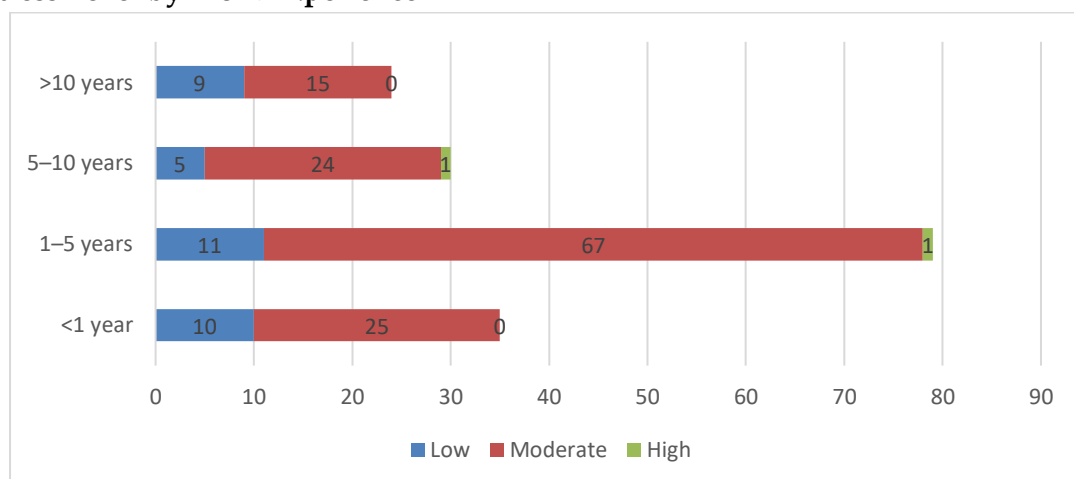


Figure 14. Distribution of Stress Levels by Work Experience

Figure 14 illustrates the occupational stress levels of healthcare personnel based on their years of work experience. Among those with less than one year of experience, 25 participants (14.9%) reported moderate stress and 10 (6%) reported low stress, with no cases of high stress. Participants with 1–5 years of experience showed the highest prevalence of moderate stress (67; 39.9%), along with 11 (6.5%) low stress and 1 (0.6%) high stress case. Those with 5–10 years of experience had 24 (14.3%) moderate stress, 5 (3%) low stress, and 1 (0.6%) high stress. For staff with more than 10 years of experience, 15 (8.9%) reported moderate stress

and 9 (5.4%) low stress, with no high stress observed. Overall, moderate stress was most common across all experience levels, highlighting that workload and job demands affect employees regardless of tenure.

5. Discussion

The findings of this study indicate that occupational stress is considerably prevalent among healthcare personnel at Maiwand Teaching Hospital, with 78% of respondents reporting moderate stress and 1.2% experiencing high stress levels. This pattern aligns with global evidence showing that healthcare professionals are particularly vulnerable to occupational stress because of the demanding nature of their duties, limited resources, and exposure to emotionally challenging situations (Alafoo et al., 2024; AlMuammar et al., 2022). The predominance of moderate stress across all demographic and professional categories – including gender, age, marital status, department, educational background, and work experience – illustrates the systemic and multidimensional nature of occupational stress in this context.

Importantly, these findings must also be interpreted within the specific socio-economic and institutional realities of Afghanistan. Healthcare facilities such as Maiwand Teaching Hospital often operate under resource constraints, personnel shortages, and inconsistent access to medical supplies, all of which amplify occupational strain. Furthermore, security challenges and economic instability create an additional layer of stress, as healthcare workers may face uncertainty regarding safety, salary stability, and workload distribution. These contextual pressures likely intensify job-related stress beyond what is typically observed in more resource-secure environments.

Gender differences in stress levels were observed, with male personnel reporting marginally higher stress than female staff. This finding is consistent with prior studies suggesting that gender-based role expectations and coping strategies may shape how individuals perceive and respond to occupational stress (Kakemam et al., 2019; Arif et al., 2020). Age and experience also moderated stress levels, as younger and less experienced workers tended to report higher moderate stress. This may be due to limited exposure to clinical complexity, lower professional confidence, and insufficient coping capacity (Feng et al., 2022; Mengist et al., 2021).

A particularly intriguing result was that married staff and personnel with bachelor's degrees exhibited higher stress levels. This pattern can be partially explained by the cultural and financial dynamics within Afghan society, where married individuals often face greater economic responsibilities, childcare demands, and family obligations. These burdens may exacerbate the strain associated with long working hours and demanding professional roles (Prasad et al., 2021). Similarly, bachelor's degree holders may experience a mismatch between their professional authority and the expectations placed upon them, carrying substantial responsibility without equivalent decision-making power or recognition. This imbalance could lead to elevated frustration and psychological strain (Safaeian et al., 2019; Dehghani Tafti et al., 2020).

Departmental differences further highlighted that staff working in high-intensity units such as ICU and dermatology experienced greater stress than those in pediatrics or ENT. This observation reflects the higher patient acuity, time pressure, and exposure to critical cases characteristic of these departments (Rink et al., 2023; Muidh et al., 2024). Taken together, these

findings emphasize the complex interplay between organizational conditions, role expectations, and personal circumstances in shaping occupational stress among healthcare personnel.

The low reported rate of “high stress” (1.2%) warrants additional consideration. While it might indicate effective coping mechanisms or institutional resilience, it may also reflect cultural reluctance to disclose extreme distress, particularly in collectivist societies where emotional endurance is socially valued. Alternatively, it could signal a limitation of the HSE Job Stress Questionnaire in fully capturing context-specific manifestations of severe stress. Future studies could employ mixed-method approaches to better understand whether this low percentage represents genuine resilience or underreporting due to social desirability or measurement sensitivity.

Overall, the findings highlight the critical need for proactive stress management interventions within Afghan healthcare institutions. Strategies such as workload redistribution, peer-support programs, psychological counseling, and regular stress management workshops can significantly reduce negative outcomes associated with occupational stress (Farrokhi et al., 2022; Stress, 2022). The study also reaffirms the validity and reliability of the HSE Job Stress Questionnaire, evidenced by a Cronbach’s alpha exceeding 0.7, consistent with prior validation studies (Marzabadi, 2011).

6. Conclusions

The present study investigated occupational stress among healthcare personnel at Maiwand Teaching Hospital, providing a comprehensive understanding of stress distribution across gender, age, marital status, professional roles, departments, education levels, and years of experience. The findings indicate that a majority of healthcare personnel experience moderate levels of stress, while a small proportion experience high stress and some low stress. These results highlight that occupational stress is a prevalent and significant concern in hospital settings, affecting both clinical and non-clinical staff.

Gender differences revealed that male staff reported slightly higher stress than female staff, suggesting that coping mechanisms and workplace expectations may influence perceived stress levels. Age and professional experience were also associated with stress, with younger and less experienced staff exhibiting higher stress levels, reflecting challenges in adapting to demanding healthcare environments. Similarly, marital status had a modest impact, with married personnel reporting slightly higher stress, potentially due to the balance of family and professional responsibilities.

Departmental differences were evident, with personnel in high-intensity areas such as ICU and dermatology experiencing higher stress levels, indicating that patient acuity and workload significantly influence stress. Educational background and professional role also played a role, with staff holding bachelor’s degrees or working in nursing reporting higher stress, likely due to greater responsibilities and expectations.

Overall, the study underscores that occupational stress is a multifactorial issue influenced by personal, professional, and organizational factors. The results emphasize the need for hospital administrators to recognize stress as a critical factor affecting employee well-being, job performance, and overall healthcare quality. Addressing occupational stress through targeted interventions is essential to promote a healthier, more productive workforce and ensure effective delivery of healthcare services.

Recommendations

To mitigate occupational stress among healthcare personnel, hospital management should implement structured stress management programs, including counseling, mindfulness sessions, and resilience training. Workload distribution should be reviewed regularly to ensure staff are not overburdened, particularly in high-intensity departments such as ICU and dermatology. Providing opportunities for professional development and mentorship can enhance confidence and reduce stress among younger and less experienced staff.

Flexible work schedules and support for work-life balance, particularly for married staff, can help reduce stress associated with family responsibilities. Establishing peer support groups and open communication channels allows staff to share experiences and coping strategies, fostering a supportive organizational culture. Regular assessment of staff stress levels using reliable tools, such as the HSE job stress questionnaire, can help administrators identify at-risk personnel and implement timely interventions. Additionally, recognizing and rewarding staff efforts can improve job satisfaction and reduce occupational stress. Hospitals should also invest in improving working conditions, including ensuring adequate staffing, access to resources, and a safe work environment.

By implementing these measures, healthcare organizations can promote mental well-being, improve job performance, reduce absenteeism, and enhance overall quality of patient care.

Future Research

Future studies should explore long-term effects of occupational stress interventions and compare stress levels across different healthcare settings and regions.

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Conflicts of Interest

The author declares no conflict of interest. As this study was conducted without external financial support, there were no funders involved in any aspect of the research process, including study design, data analysis, interpretation, or publication decisions.

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