



ORIGINAL ARTICLE

The Relationship between Occupational Stress and Quality of Work Life among Educational Administrative Staff at Zabol University of Medical Sciences

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ABSTRACT

Introduction: Occupational stress and quality of work life (QWL) are key factors affecting employees' well-being and organizational performance. Understanding their relationship among educational administrative staff can help design effective interventions. Therefore, this study aimed to investigate the relationship between occupational stress and QWL among educational administrative staff at Zabol University of Medical Sciences.

Materials and Methods: This descriptive correlational study was conducted in 2022 among all educational administrative staff (n = 120) in the educational sector of Zabol University of Medical Sciences. Participants completed a demographic questionnaire, Walton's QWL questionnaire, and the Health and Safety Executive (HSE) Occupational Stress questionnaire. Data were analyzed using descriptive statistics, independent t-tests, one-way ANOVA, and Pearson correlation in SPSS version 25. The significance level was set at $p < 0.05$.

Results: The mean age of participants was 34.5 ± 6.2 , and the mean work experience was 9.4 ± 5.6 . The mean QWL score was 110.2 ± 15.6 , and the mean occupational stress score was 112.5 ± 14.3 , indicating moderate levels of both variables. No significant differences were found in occupational stress or QWL based on gender or marital status. However, QWL significantly differed by education level ($P = 0.008$), with employees holding a master's degree or higher reporting lower QWL. Pearson correlation analysis showed a significant positive relationship between QWL and occupational stress ($r = 0.36$, P -values < 0.001), indicating that lower stress is associated with higher QWL.

Conclusion: Educational administrative staff with lower occupational stress report higher QWL. These findings highlight the need for stress management and supportive workplace interventions to enhance QWL among university administrative staff.

Keywords: Occupational stress, Quality of work life, Administrative staff, Higher education, University

Introduction

Stress is the body's response to external stimuli that challenge normal functioning, manifesting in mental or physical behaviors (1). While moderate stress can be adaptive and even beneficial, chronic or excessive stress can negatively affect physical and mental health, leading to psychological disturbances, changes in habits and lifestyle, reduced energy, and diminished positive emotions (2). Work is a major component of social identity, a source of livelihood, and a means of forming social

relationships, but it is also an important source of stress (3).

The level and sources of stress vary across occupations, primarily due to differences in working conditions and job responsibilities. Employees in the health system are particularly prone to occupational stress. Occupational stress refers to the physiological and psychological strain that occurs when an individual's capabilities are insufficient to meet the demands and pressures of a specific work

situation (4, 5). High levels of stress can reduce service quality, attention, concentration, decision-making ability, and overall job performance. In addition, occupational stress can decrease job satisfaction, increase burnout, reduce work commitment, and even contribute to employees' decisions to resign (6, 7). One of the most significant consequences of occupational stress is its negative impact on the quality of work life (8).

Quality of life is defined as an individual's perception of their position in life within the cultural and value systems in which they live, relative to their goals, expectations, and concerns (9). The quality of work life (QWL) reflects the extent to which organizational culture and management practices provide employees with a sense of ownership, autonomy, responsibility, and self-esteem (10). Studies have shown that improving employees' status, dignity, and opportunities for advancement enhances organizational effectiveness and efficiency (11, 12). QWL affects employees' perception of the organization, their participation in decision-making, and their satisfaction with work, which in turn reduces work-related stress and improves service quality (8, 13). Employees with higher QWL demonstrate stronger organizational identity, greater job satisfaction and performance, lower turnover intention, fewer complaints, reduced absenteeism, increased compliance with organizational rules, and higher engagement in organizational programs (8, 10, 11, 14).

Universities operate within their own internal normative systems, which shape the academic and scientific environment. Maintaining and strengthening these norms, as well as ensuring high-quality organizational practices, supports the effective functioning of university operations, whereas weakening them may lead to functional inefficiencies (15). Considering the important role of educational administrative staff in supporting the academic mission, this study was designed to investigate the relationship between occupational stress and QWL among educational administrative staff at Zabol University of Medical Sciences.

Materials and Methods

Study Design and Setting

This descriptive correlational study was conducted in 2022 at Zabol University of Medical Sciences. The study was carried out in the educational sector of the university, including the Office of the Vice-Chancellor for Education and the educational offices of the Faculties of Medicine, Pharmacy, Paramedicine, Nursing and Midwifery, and Health.

Population and Sampling

The study population consisted of all educational administrative staff working in the educational sector of Zabol University of Medical Sciences. Faculty members were excluded from the study.

A total of 120 eligible personnel were identified, and a census sampling method was employed. Therefore, all eligible staff were invited to participate, resulting in a sample size equal to the study population ($n = 120$). Inclusion criteria were employment as educational administrative staff in the educational sector, having at least six months of work experience in the current position, and willingness to participate in the study and complete the questionnaires. Exclusion criteria included incomplete questionnaires, withdrawal from the study at any stage, and temporary employment with less than six months of work experience.

Data Collection and Instruments

Data were collected using three instruments: a demographic information questionnaire, Walton's QWL questionnaire (Walton) (16) and Occupational Stress Questionnaire and: (HSE) (17). Demographic information included age, gender, marital status, education level, and work experience.

Walton's QWL questionnaire consists of 35 items scored on a five-point Likert scale ranging from 1 (completely dissatisfied) to 5 (completely satisfied). The total score ranges from 35 (lowest QWL) to 175 (highest QWL), with higher scores indicating better QWL and lower scores indicating poorer quality. The questionnaire evaluates eight

dimensions: fair and sufficient income, safe and healthy work environment, development of human capabilities, opportunities for continuous growth and security, integration and social cohesion, legality in the organization, general life atmosphere, and social relevance of work life. The reliability of the questionnaire has been reported with a Cronbach's alpha of 0.91 (18).

Occupational stress was measured using the HSE questionnaire, which includes 35 items across seven dimensions: role, communication, managerial support, peer support, control, demand, and changes. Each item is scored on a five-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always). The total possible score ranges from 35 (highest occupational stress) to 175 (lowest occupational stress). Therefore, higher scores indicate lower levels of occupational stress, and lower scores indicate higher stress. The reliability of this questionnaire has been reported as 0.78.

Statistical Analysis

Data were analyzed using SPSS software version

25. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize the data. Independent t-tests and one-way analysis of variance (ANOVA) were applied to examine differences in occupational stress and QWL across demographic variables (gender, marital status, and education level). Pearson correlation analysis was performed to assess relationships between occupational stress, QWL, age, and work experience. The significance level was set at $p < 0.05$.

Results

1. Demographic Characteristics

A total of 120 educational administrative staff participated in the study. The mean age was 34.5 ± 6.2 (range: 23–45), and the mean work experience was 9.4 ± 5.6 (range: 1–26 years). Most participants were female (64%) and married (73%). Regarding education, 66% held a bachelor's degree, 18% an associate degree, and 16% a master's degree or higher (Table 1).

Table 1. Demographic Characteristics of Participants

| Variables | | Frequency | Percentage |
|----------------|------------|-----------|------------|
| Gender | Male | 43 | 36.0 |
| | Female | 77 | 64.0 |
| Marital status | Single | 32 | 27.0 |
| | Married | 88 | 73.0 |
| Education | Associate | 22 | 18.0 |
| | Bachelor | 79 | 66.0 |
| | Master/PhD | 19 | 16.0 |

2. Quality of Work Life and Occupational Stress

The mean QWL score was 110.2 ± 15.6 (range: 35–175), indicating a moderate level of QWL among participants. The mean occupational stress

score was 112.5 ± 14.3 (range: 35–175), reflecting moderate stress levels, with higher scores representing lower stress (Table 2).

Table 2. Descriptive statistics of QWL and occupational stress

| variable | Mean \pm SD | Range |
|----------------------|------------------|--------|
| Quality of work life | 110.2 ± 15.6 | 35–175 |
| Occupational stress | 112.5 ± 14.3 | 35–175 |

3. Comparison Based on Demographics

Independent t-tests and one-way ANOVA showed no statistically significant differences in occupational stress scores based on gender, marital status, or education level (P-values > 0.05). Similarly, QWL did not significantly differ by gender or marital status (P-values > 0.05).

However, a statistically significant difference in QWL was observed across education levels (P-values = 0.008). Post hoc analysis (Tukey test) revealed that participants with a master’s degree or higher reported significantly lower QWL compared to those with associate or bachelor’s degrees (Table 3).

Table 3. Comparison of mean occupational stress based on demographic characteristics

| Variables | | Mean | SD | P |
|-----------------|------------------|-------|------|-------|
| Gender | Men | 116.1 | 8.5 | 0.145 |
| | Women | 111.0 | 12.1 | |
| Marital status | Single | 110.8 | 12.3 | 0.474 |
| | Married | 113.6 | 10.7 | |
| Education level | Associate degree | 110.2 | 10.7 | 0.768 |
| | Bachelor | 113.2 | 12.0 | |
| | Master and Ph.D. | 114.0 | 8.3 | |

Pearson correlation analysis showed no significant associations between occupational stress and either age or work experience. Similarly,

quality of work life was not significantly correlated with age or work experience (Table4).

Table 4. Correlation of age and work experience with occupational stress and quality of work Life

| Variables | Occupational stress (r) | P | Quality of work life (r) | P |
|-----------------|-------------------------|------|--------------------------|------|
| Age | 0.11 | 0.21 | 0.09 | 0.28 |
| Work experience | 0.08 | 0.34 | 0.07 | 0.39 |

4. Correlation between Quality of Work Life and Occupational Stress

Pearson correlation analysis showed a statistically significant positive relationship between quality of work life and occupational stress scores (r = 0.36,

P-valuesp < 0.001) (Table 5). Since higher scores on the occupational stress questionnaire represent lower levels of stress, this finding indicates that employees with lower occupational stress reported significantly higher quality of work life.

Table 5. Correlation between quality of work life and occupational stress

| Variables | Quality of working life | Occupational stress |
|-------------------------|-------------------------|---------------------|
| Quality of working life | 1 | 0.36 |
| Occupational stress | 0.36 | 1 |

Discussion

This study investigated the relationship between occupational stress and quality of work life among educational administrative staff at Zabol University of Medical Sciences. The results indicated that the participants’ average QWL score was moderate,

suggesting there is room for improvement in work life quality. These findings are consistent with the study by Abbas & Thamima in Bangladesh, which reported moderate QWL among nurses (19). Similarly, Ansari et al. (13) found that nurses’ work life quality was at an average level, and

highlighted the significant role of organizational justice, professional values, and self-efficacy in shaping QWL (13). These results emphasize the importance of managerial attention and organizational policies aimed at enhancing employee well-being, satisfaction, and performance.

This study investigated the relationship between occupational stress and quality of work life among educational administrative staff at Zabol University of Medical Sciences. The results indicated that the participants' average QWL score was moderate, suggesting room for improvement in work life quality. These findings are consistent with the study by Al-Otaibi & Kerari (2025) in primary care nurses from Saudi Arabia, which reported moderate overall QWL and highlighted significant correlations with personal and work-related factors (20). Similarly, Seid et al. (21), in a systematic review and meta-analysis of nurses in Ethiopia, found that QWL levels varied across subgroups and emphasized multiple organizational and individual factors affecting nurses' work life quality (21). These results highlight the importance of managerial attention and organizational policies aimed at improving employee well-being, satisfaction, and retention.

The mean occupational stress score among participants was moderate, which is consistent with findings from a 2025 study reporting moderate stress levels among nurses alongside significant associations with social support and workplace conditions (22). However, another research has documented high occupational stress among healthcare workers exposed to intense workloads, limited autonomy, and communication challenges in clinical settings (7). Occupational stress often arises from mental and emotional demands, work overload, and inadequate organizational support. Evidence suggests that social support and supportive workplace environments are significantly associated with lower perceived stress levels and can serve as protective factors against occupational strain (22). A supportive work environment, clear communication, and collegial

cooperation can therefore reduce stress and enhance employees' efficiency and satisfaction.

The mean occupational stress score among participants was moderate. This aligns with Aghilinejad's study, which reported moderate stress levels among nurses (23). However, studies by Nasiri et al. indicated high stress levels in healthcare staff (24). Occupational stress often arises from mental and emotional demands, work overload, and inadequate support. A supportive work environment, clear communication, and collegial cooperation can reduce stress and enhance employees' efficiency and satisfaction.

Interestingly, this study found a significant positive correlation between QWL and occupational stress scores, meaning that employees with lower stress reported higher quality of work life. This is consistent with findings from Ghalee et al. (25), who reported a strong positive association between QWL and occupational stress. However, some studies, such as Khaghanizadeh and Khaqani et al. (22), reported inverse or no significant relationships between these variables. Such discrepancies may be attributed to differences in occupational roles, organizational culture, work environments, and social contexts.

No significant relationship was observed between QWL and demographic variables such as gender, marital status, or work experience in the present study. These findings differ from some previous research which suggested that demographic factors may influence work life quality in other contexts (e.g., gender, marital status, and work experience have been associated with variations in QWL in multiple settings) (21, 22). One possible explanation for the lack of association in the present study may relate to the specific organizational and cultural context of Zabol University of Medical Sciences, where uniform work conditions and similar role expectations across staff could attenuate the effects of demographic characteristics on perceived QWL.

Education level, however, was significantly associated with QWL. Participants with a master's

degree or higher reported lower QWL compared to those with lower educational levels. This may reflect higher expectations from the organization among more educated staff; unmet expectations can lead to dissatisfaction and decreased perceived quality of work life. This finding contrasts with Bakhshi et al. (26), who did not find such a relationship, highlighting the influence of local organizational and cultural factors.

Regarding occupational stress, no significant relationship was found with age, gender, marital status, work experience, or education level. A recent study conducted among nurses in Hebron hospitals also reported moderate levels of occupational stress, with no statistically significant associations between stress scores and demographic variables such as age, gender, marital status, job title, or work experience (27). These findings suggest that occupational and environmental contexts, as well as organizational factors, may play a stronger role than individual demographics in determining stress levels.

Limitations of this study include its single-center design and relatively small sample size, which may limit the generalizability of the findings. Future research should examine these variables across multiple universities and diverse administrative populations to provide a more comprehensive understanding of the factors affecting QWL and occupational stress.

Conclusion

The present study revealed that educational administrative staff at Zabol University of Medical Sciences experienced moderate levels of occupational stress and relatively low quality of work life. Although no significant relationship was found between occupational stress and QWL, the findings highlight the importance of addressing employee well-being, as low QWL can reduce motivation, job satisfaction, and overall organizational productivity. To improve QWL and reduce stress, organizations should focus on enhancing the work environment by providing safe, ergonomic, and psychologically supportive

conditions, promoting employee participation in decision-making to increase engagement and sense of control, and implementing stress management programs such as training on time management, coping strategies, and mindfulness.

Additionally, fair compensation and recognition systems, as well as opportunities for professional development and career progression, can help meet employee expectations, increase motivation, and support personal and professional growth. By adopting these strategies, universities and similar organizations can create a healthier work environment, improve employee satisfaction, and enhance overall organizational efficiency and performance.

Ethical considerations

Ethical approval for the study was obtained from the Ethics Committee of Zabol University of Medical Sciences (IR.ZBMU.REC.1399.098). Participation was voluntary, and all participants provided informed consent. Moreover, confidentiality of participants' responses was strictly maintained throughout the study.

Authors' contributions

P.I conceptualized and designed the study. P.I, M.S, and H.M were involved in data collection and fieldwork. HM and PI performed data extraction and analysis. All authors contributed to the interpretation of results and were responsible for drafting and revising the manuscript. All authors approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

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Conflict of interest

The authors declared no conflict of interest.

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