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Statistical Analysis of the Relationship Between Occupational Stress and Career Wellbeing Among Nurses

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Abstract: The study aimed to examine the occupational stress and career wellbeing levels among nurses, and to explore the relationship between these two variables. Methods: The study used a quantitative technique by correlational method. A sample of 406 nurses in Amman, Jordan was collected voluntarily. The study used both occupational stress scale and career wellbeing scale. Results: The results revealed moderate levels of both occupational stress and career wellbeing among the sampled nurses. Moreover, there is a statistically significant negative relationship between occupational stress and career wellbeing and its dimensions. Recommendation: Hospital management and healthcare administrators should focus on this issue to enhance nursing performance. Furthermore, they should provide special assistance, training programs, and support among nursing staff.

Keywords: Occupational Stress, Career Wellbeing, Nurses, Statistical Analysis, Amman, Jordan.

1. Introduction

Working in the medical and healthcare professions is one of the most important fields for humanity due to the pivotal role they play in maintaining individuals' health. Nurses who work in hospitals have to deal with many cases and interact with patients. They must perform their duties toward patients regardless of their patients' psychological and physical health conditions. This can pose numerous difficulties and challenges for nurses, leading to negative psychological effects due to facing occupational stress. Consequently, achieving work-life balance and practicing self-care to maintain psychological well-being is crucial, especially for career wellbeing. This protects nurses from occupational and psychological problems.

Stress to some extent can be positive and helps individuals in personal growth and motivates them for achievement. However, it can also lead to negative consequences particularly when it exceeds a very high and certain level and persists over extended periods. Consequently, this hinders individuals' productivity and their ability to work and achieve, and thus negatively affects employees' wellbeing, the work team and the organizational climate itself. Employees who are stressed often face problems, have higher rates of burnout, and reduced organizational commitment. Accordingly, this can result in increasing their resignation rates, which in turn leads to the loss of skilled employees, increased recruitment, and training costs [1].

Occupational stress is one way in which workplace stressors (pressures) can lead to psychological, physiological, or behavioral manifestations of stress and health effects in the long term. Fundamentally, it manifests as emotional and physical responses that occur when job demands exceed an employee's abilities, resources, or needs [2].

The impact of work-related stress extends beyond the individuals, affecting their organizational climate, work team, and their interpersonal relationships, which has a negative effect on the individual and the work. In addition, it may increase or reduce occupational stress [3].

Jachens et al. [4] identified the factors that particularly affect humanitarian work and related to occupational stress, including rewards such as feelings of accomplishment and pride, "emergency culture", leading to high engagement in work, constant and unpredictable changes in work, unrealistic work demands, inability to withdraw when needed, inadequate self-care practices, and limited availability of social support networks.

Occupational stress has profound effects on nurses and their job performance, which can be decreased by improving workplace safety, support, and career wellbeing [5]. In this regard, Storm & Rothmann [6] demonstrated that career wellbeing significantly reduces the occupational stress considering the role of career wellbeing in minimizing the stressors and gives a person positive affective career state and a sense of meaningfulness.

Career wellbeing can be defined as a variable that activates coping readiness even when workers face adversity, furthermore, it helps in developing interventions that assist in coping with challenges [7]. In the absence of career wellbeing, the employees may highly suffer from exhaustion, tiredness (occupational burnout), and negative feelings that drain the individual's overall

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energy [8].

Career wellbeing can be assessed through various behavioral indicators, including positive interaction at work, activity levels, stress tolerance resulting from work pressures, and the interaction between individuals and their professional environment. It can be concluded that if there is a mismatch between employees and their job, there will be an inability to control their working conditions, ineffective adaptation, or a lack of social support, it is likely to lead to illness alongside negative emotional, cognitive, behavioral, and physiological reactions. Significantly, these are the same reactions that can result from burnout, including emotional or physical exhaustion, decreased work productivity, and a lack of personal fulfillment [9].

Nurses play a critical role in patient care; therefore, they should focus on their career wellbeing that related to both their health and work efficiency. Empirical evidence demonstrates that career wellbeing among nurses is a critical variable in their work performance and ability of caregiving. Conversely, the low career wellbeing is associated with burnout, low job satisfaction, and high turnover [10-11]. On the other hand, suicide rates among nurses must be taken into account as well as study career wellbeing among them [12].

Research by Coetzee [7] demonstrates that career wellbeing activates coping readiness even when individuals are faced with adversity. Consequently, this can help in decreasing occupational stress among nurses, especially they face many negative feelings in Jordan. Research indicates that 43% of nurses in Jordan suffer from high levels of burnout, 55% of them experience high emotional exhaustion, 39% experience reduced personal accomplishment, and 33% suffer from high levels of psychological pressure and job stress [13-14].

1.1 Research problem

The occupational stress is one of the most important variables that affect many aspects among nurses. It has effects on organizational climate, relations with others, and the provided services. The higher level of occupational stress may lower career wellbeing, also it plays a crucial role in nurses' mental health. Consequently, the present study investigates if there is a relationship between occupational stress and career wellbeing among nurses.

1.2 Research Questions

1. What are the levels of Occupational Stress and Career Wellbeing among nurses?
2. Is there a relationship between Occupational Stress and Career Wellbeing among nurses?

1.3 Objective of the paper

The objective of this paper is to extract the levels of Occupational Stress and Career Wellbeing among nurses and establish a relationship among them.

1.4 Research Methodology

1.4.1 Study design

This study follows the quantitative technique by correlational method. A sample of 406 nurses in Amman, Jordan was collected voluntarily; the informed consent was obtained both verbally and in writing. Furthermore, the researchers were granted approval from health institutions.

1.4.2 Participants

The volunteering sample comprising 406 nurses in Amman, Jordan was selected, representing 30.5% of the target population. The participants' ages ranged between 25-60. 36.5% of them were males, while 63.5% were females. Moreover, 68.7 of them worked in public hospitals, while 31.3% worked in private hospitals. The years of experience ranged between 1-17 years; 26.1% of them had an experience less than 5 years, 30% between 5-10 years, and 43.8% more than 10 years.

Table 1: Descriptive analysis of the participants

Variable		Career Wellbeing	Occupational stress	N	%
Gender	**Male**	2.97±1.07	3.20±1.06	148	36.5
	Female	2.99±1.08	3.39±0.97	258	63.5
Hospital type	**Public**	2.99±1.04	3.35±0.95	279	68.7
	Private	2.97±1.16	3.26±1.11	127	31.3
Experience	**Less than 5 years**	2.85±1.12	3.53±0.97	106	26.1
	5-10 years	3.06±1.16	3.31±1.02	122	30.0
	More than 10 years	3.00±0.98	3.21±1.00	178	43.8
Total		2.98±1.08	3.32±1.00	406	100.0

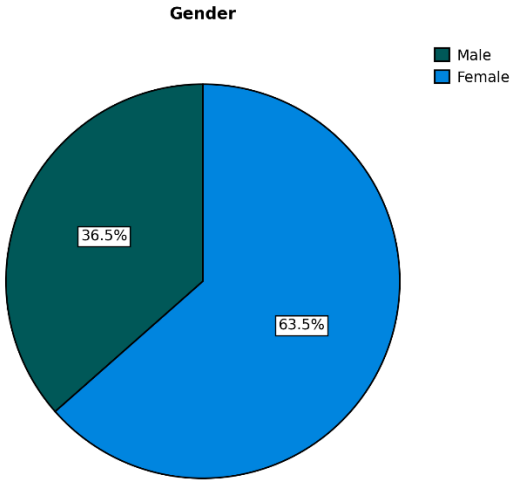

Fig. 1: Participants distribution due to Gender

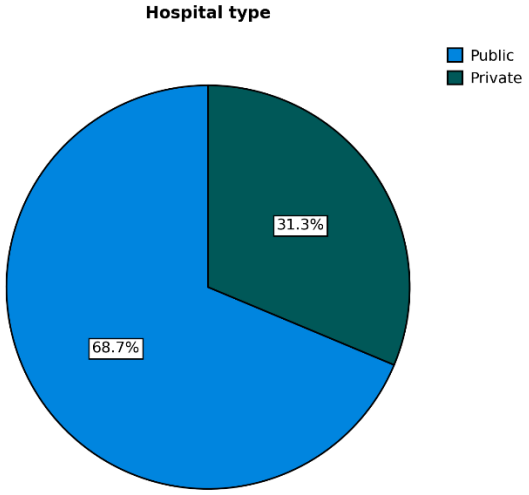

Fig. 2: Participants distribution due to Hospital type

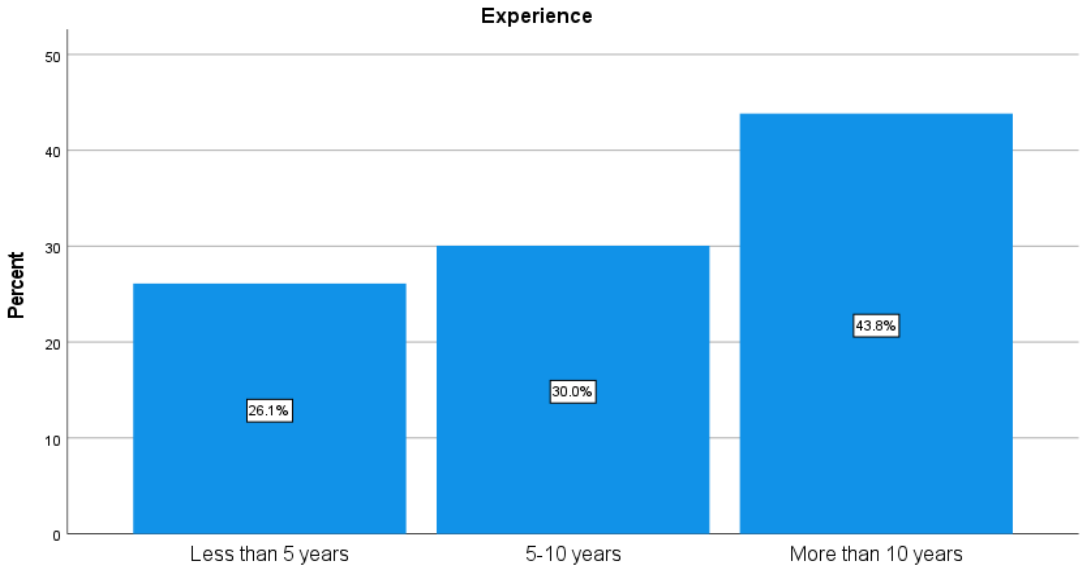

Fig. 3: Participants distribution due to Experience

1.4.3 Data Collection Tools

1.4.3.1 Career Wellbeing scale

The researchers developed a scale of 14 items from [7]. Participants rated each item on a five-Likert scale, from 1 (Very low agreement) to 5 (Very high agreement). Higher scores reflect a higher level of career wellbeing. The researchers extracted the validity and reliability and indicated that the discrimination evidence ranged between 0.736 and 0.945. Cronbach's alpha ranged between 0.901 and 0.965.

1.4.3.2 Occupational Stress Scale

The researchers developed a scale of 20 items from [15-17]. Participants rated each item on a five-Likert scale, from 1 (Very low agreement) to 5 (Very high agreement). Higher scores reflect a higher level of occupational stress. The researchers extracted the validity and reliability and indicated that the discriminate evidence ranged between 0.604 and 0.864. Cronbach's alpha was 0.961.

1.4.4 Data Collection

The researchers obtained approval for this study from the Institutional Review Board at the Ministry of Health. The registration number is MOH/REF/2026/224. The date was 15/4/2026. Anonymized data were collected using online instruments through Google forms. The link was sent to them after describing the research and obtained the consent in hospitals. Data were collected between 16/4-10/5/2026.

1.4.5 Data Analysis

The collected data were compiled and entered by the researchers into SPSS data sheet and used IBM SPSS Statistics for Windows, version 22 (IBM Corp., Armonk, N.Y., USA) to analyze the data, Means, standard deviations, and Pearson's correlation were calculated. There were no missing data because all questions were required to be answered in the Google form.

1.4.6 Ethics and Consent

The researchers obtained verbal and written approval for this study from the Institutional Review Board at the Ministry of Health. The registration number is MOH/REF/2026/224. The date was 15/4/2026.

The informed consent was taken verbally and in writing. Furthermore, the researchers obtained approval from the institutions.

2. Results and Conclusion

2.1 The Level of Occupational Stress and Career Wellbeing

To investigate the level of occupational stress and career wellbeing among nurses, Means and standard deviations were calculated. Table 2 demonstrates that the level of occupational stress among nurses was moderate with a mean of (3.32±1.003), while the level of career wellbeing and its dimensions was moderate with a mean ranged between (2.80-3.29) for the dimensions and (2.98±1.076) for the total degree. Moreover, the results indicated normal distribution in all variables. The Skewness of occupational stress was -0.604 and the Kurtosis was -0.423 as presented in Figure 4. The Skewness of career wellbeing was 0.069 and the Kurtosis was -0.905 as presented in Figure 5.

Table 2: Means and standard deviations of the occupational stress and career wellbeing

Variable	Dimensions	Mean	Std.	Level	Skewness	Kurtosis
Occupational Stress		3.32	1.003	Moderate	-0.604	-0.423
Career Wellbeing total	**Career Wellbeing total**	2.98	1.076	Moderate	0.069	-0.905
	Positive impact of professional status	2.80	1.109	Moderate	0.297	-0.839
	State of job meaning	3.29	1.169	Moderate	-0.412	-0.874
	Professional network/social support	2.93	1.201	Moderate	0.043	-1.071

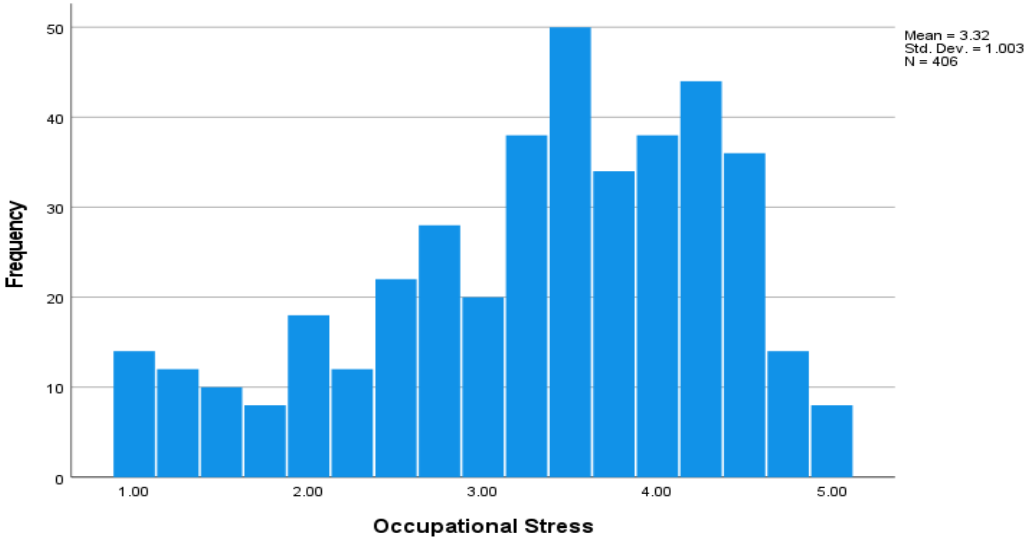

Fig. 4: Normal distribution of Occupational Stress

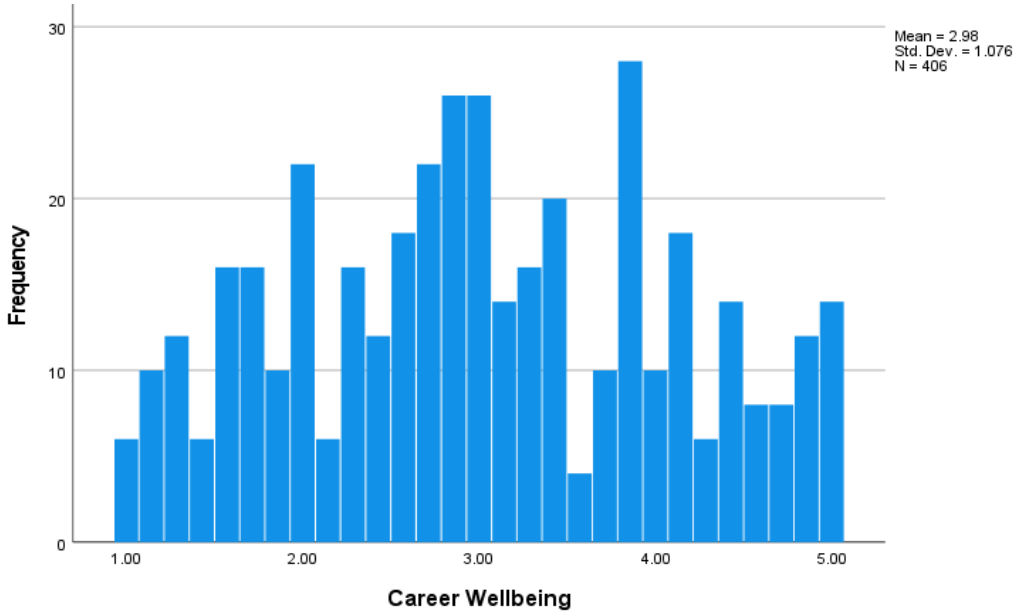

Fig. 5: Normal distribution of Career Wellbeing

2.2 The Relationship between Occupational Stress and Career Wellbeing

To investigate the relationship between occupational stress and career wellbeing among nurses, Person correlation coefficients were calculated. Table 3 demonstrates that there is a statistically significant negative relationship between occupational stress and career wellbeing (R= -.464). Moreover, there is a statistically significant negative relationship between occupational stress and career wellbeing dimensions (R= -0.421 and -0.441).

Table 3: Person correlation test results between Occupational Stress and Career Wellbeing

Variable	**Occupational Stress**	
	Correlation	**Sig.**
Career Wellbeing total	-.464**	0.000
The positive impact of professional status	-.441**	0.000
State of job meaning	-.421**	0.000
Professional network/social support	-.433**	0.000

** sig at the 0.01 level (2-talied)

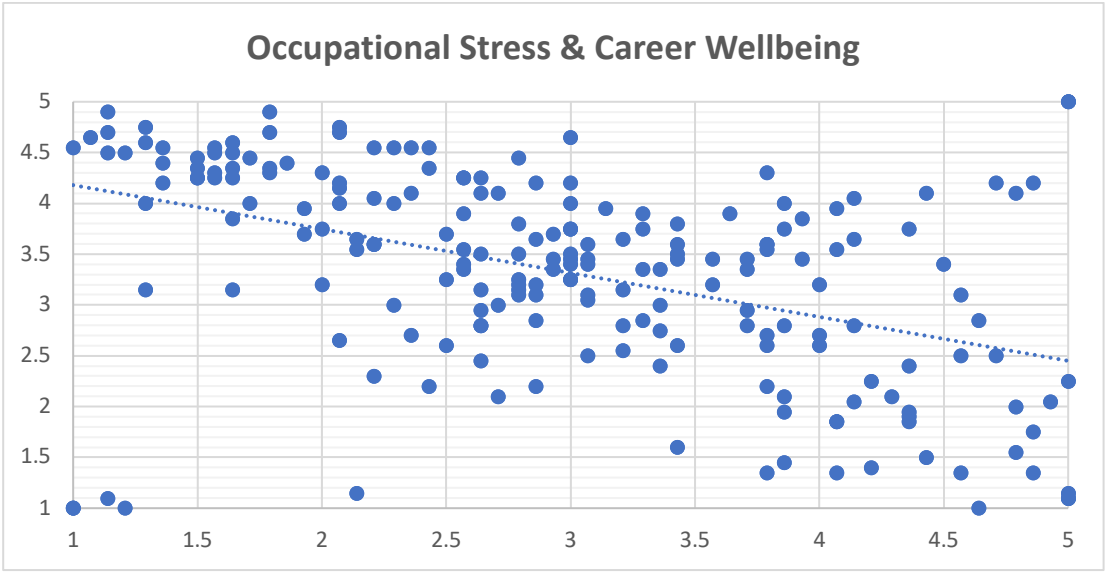

Fig. 6: Scatter plot for the relationship between Occupational Stress and Career Wellbeing

3. Discussion

The results demonstrated a negative correlation between occupational stress and career wellbeing. Moreover, the levels of occupational stress and career wellbeing were moderate.

These results can be due to the work pressures that nurses experienced in hospitals as well as the nature of their job. In Jordan, there are 37 nurses for every 10 thousand citizens according to the Ministry of Health [18]. Accordingly, nurses work more than one shift per day, which makes them work for a long time and care for many patients, therefore, this affects their mental health. Consequently, this affects their social life and the relationships with their family and friends because they cannot balance between their social life and work requirements. Furthermore, they do not have time for self-care, which leads to reducing the level of career wellbeing [19].

Nurses may experience negative feelings of routine, boredom, negativity, dissatisfaction, and disengagement because of the required tasks [20], and inability to balance with life demands and the low satisfaction due to low income [21]. This may lead to increasing the levels of their occupational stress and decreasing career wellbeing.

The moderate level of occupational stress can be explained by lacking self-attention and self-care skills among nurses, and the insufficient time for experiencing flow state, relaxation, and engaging in activities because of high work pressures. The inability to express emotions, exhaustion, and feelings of depletion due to the lack of coping skills. Nurses may suffer from sharing their sad feelings and bear their emotional burdens [22].

Hospitals do not provide self-care programs for nurses, that have a significant effect in helping those nurses to cope with occupational stress [23]. Nurses assigned for many quantitative and qualitative tasks and duties that are beyond their capabilities leading to role conflict according to the shortage in nursing staff in Jordanian hospitals [24-26].

In general, the organizational climate in hospitals is very stressful, and nurses in Jordan feel dissatisfaction with it [19]. In addition, it is a traumatic job when exposed to severe medical cases, which ruins the sense of enjoyment and makes it difficult to perceive their performance as successful and enjoyable, especially if the patients die in their shifts. Consequently, feeling career wellbeing is difficult in this negative organizational climate, thereby increasing their occupational stress.

The explanation for the negative relationship between occupational stress and career wellbeing can be attributed to the fact that the nurses cannot enhance their psychological, physical, social, emotional, spiritual, and professional well-being due to time pressure, workload burden, lack of professional and social support, limited career advancement, and absence of self-care skills, such as meditation, relaxation, self-awareness, spiritual practices, and coping. They may also struggle with concentration, feelings of fatigue, integration into work, loss of commitment and perseverance, boredom, shift work, task diversity due to work pressure, resulting in higher levels of occupational stress.

Figure 6 demonstrates that the scatter plot for the relationship between occupational stress and career wellbeing is distributed in a good relation because it is near the correlation line, even if some of the point was odd, but it is not important due to its small number.

Hospitals should focus on career wellbeing because it has an important role in improving services and caring quality and makes nurses feel relieved and can concentrate on their jobs. Furthermore, they will be happy doing their work and feel less stressed.

4. Conclusion

This study reveals that there is a negative relationship between occupational stress and career wellbeing among nurses, and it is evident when occupational stress increased and career wellbeing decreased, and vice versa. This helps us to manage the occupational stress among nurses by focusing on career wellbeing among them. In addition, there is a moderate level of occupational stress and career wellbeing among nurses. Accordingly, managers and hospitals should highlight this issue because it affects nurses' performance. Moreover, they should provide special assistance, training programs, and support among nursing staff. Thus, future research should consider coping, social support, and job satisfaction as potentially important variables.

Data Availability:

The datasets analyzed during the current study were available from the corresponding author upon reasonable request.

Conflict of Interest:

The authors declared no conflicts of interest in this study.

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Consent to Participate:

Participants provided informed consent to participate in this study.

Ethics approval:

This study followed the principles of the Committee on Publication Ethics (COPE).

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