

ORIGINAL ARTICLE

The Effect of Work-Related Stress and Burnout on Nursing Performance and Job Satisfaction

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ABSTRACT

*While there is much research on work-related stress among nurses in the literature, little attention has been focused on the effect of work-related stress and burnout on nursing performance and job satisfaction in hospitals within Saudi Arabia. In particular, studies from the western region of Saudi Arabia are lacking. Therefore, this study focuses on nurses working at intensive care unit (ICU) at Qurrayat General Hospital. Being the only governmental general hospital at this city; nearly all cases are admitted to receive care. This issue increase nurses workload in general and ICU nurses in particular. Aim was to study the effect of work-related stress and burnout on nursing performance and job satisfaction. Research Design: Correlational descriptive design was used in conducting this study. Sample: Quota sample was used where all nurses at ICU were recruited. Instruments: Four instruments were used for data collection: Oldenburg Burnout inventory (OBI) scale, Work-related stress questionnaire, McCloskey/Mueller satisfaction scale (MMSS), Nursing performance checklist. There was a moderate level of burnout, high level of work-related stress, high level of job satisfaction, and a moderate level of job performance among Saudi nurses. In addition, the present study reported that burnout is positively associated with high levels of stress, and both burnout and work-related stress are positively correlated to the job performance. Based on the current study findings, it can be concluded that the present study findings succeeded to answer both research questions. Based on the results of the present study, the following are recommended: Replication of the current study using more larger sample to generalize the findings. Increasing the nurses' knowledge and awareness about the coping mechanism that enable them to adapt the stressful situations. Provide them with sufficient training to improve their adaptation to the crisis's events. In addition, the study recommends the policy makers in the healthcare sector to improve the job status of the nursing staff in Saudi Arabia.*

Keywords: Mueller satisfaction scale, ICU, Work-Related Stress, Burnout

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INTRODUCTION

The nursing profession is inherently challenging, exposing individuals to significant levels of stress. Nurses face daily encounters with intense human suffering, grief, and death, which are experiences that few other professions endure to such an extent. Their responsibilities often include tasks that are repetitive, unrewarding, and, at times, unpleasant or even degrading, creating additional psychological strain. These realities emphasize the critical need for dedicated efforts and resources to examine, report, and address stress levels among nurses, given the frequent exposure to such stress-inducing factors in their line of work (1, 2). In Saudi Arabia, nurses represent the largest segment of the healthcare workforce. The country employs approximately 139,701 nurses to cater to a population of 29,195,895, resulting in an estimated nurse-to-patient ratio of 1:208. A distinctive feature of the nursing sector in Saudi Arabia is its workforce composition, with 64% of the nurses being non-Saudis and 36% being Saudi nationals. This diversity highlights a unique characteristic of the healthcare services in the Kingdom (3). Saudi Arabia, given its population size, plays a significant role in ensuring the provision of an effective healthcare system for its residents. A healthcare system serves as the framework through which a nation

addresses the medical needs of its people. In Saudi Arabia, healthcare services are predominantly delivered through a government-run national system. This system is categorized into three types of hospitals: public hospitals, hospitals operated by other government agencies, and private hospitals. In terms of financial commitment, Saudi Arabia spends \$659 per capita on healthcare, a figure notably lower than \$8,233 in the USA and \$3,495 in the UK. Similarly, healthcare expenditure as a percentage of GDP stands at 4.0% in Saudi Arabia, compared to 9.6% in the UK and 17.6% in the USA (4). Saudi Arabia faces unique challenges in the nursing sector compared to other countries. Despite significant investments in its healthcare system, there are ongoing issues in nursing, particularly related to workforce shortages. Although the number of nurses has recently increased, it remains insufficient to meet the growing demand of the country's population. In addition to the shortage of nurses, other challenges affecting the profession include gaps in education, social and cultural barriers, and issues within the healthcare system itself (5). Nursing has recently been acknowledged as a high-stress profession, with numerous negative impacts documented on nurses' well-being (6). Work-related stress, coupled with job dissatisfaction, is contributing to growing disillusionment within the healthcare sector (7). These challenges are impacting nurses' mental health and job retention, further exacerbating the ongoing workforce issues in healthcare. Recent studies in the 21st century have refined the definition of stress, emphasizing its strong connection to the workplace environment. Terms such as "work stress," "job stress," and "occupational stress" have emerged and are now often used interchangeably. Occupational stress can be understood as a characteristic of the work environment, often considered an objectively measurable aspect (8). (9) shares a similar perspective, asserting that "stress is that which happens to the man, not that which happens in him; it is a set of causes, not a set of symptoms" (10). This definition is especially relevant to workplace situations, where stress is triggered by work-related problems. (11) further expands on this concept, describing stress as a response to work challenges. He suggests that stress is not merely a result of external pressures, but rather how individuals react to those pressures. Over time, the symptoms of stress have been classified in various ways. Earlier studies focused on distinguishing between individual and organizational symptoms, while more recent research has categorized them based on their impact, such as emotional, mental, physical, and behavioral symptoms. The causes of stress have typically been divided into two categories: work content (the nature of the work itself) and work context (the environment in which the work occurs). The effects of stress are often discussed in terms of its impact both on the organization, such as reduced productivity and high turnover, and on the individual, including health issues and decreased job satisfaction (12). Work-related stress is strongly linked to professions that involve prolonged direct interaction between practitioners and clients (13). Nursing is one of these high-stress professions, with stress being identified as a significant cause of physical, psychological, and behavioral disorders among nurses (14). In Saudi Arabia, stress, as a psychological reaction to workplace stimuli, has notably affected the performance of nurses in hospitals (14). Over the past 50 years, there has been increasing interest and research on stress within the healthcare industry, leading to a growing body of data on the prevalence of stress in nursing. This has highlighted a significant rise in job-related stress among nurses (15). The causes of stress among nurses can be traced back to the early research on the topic, particularly the work of (16). 16's findings indicated that stress in the nursing profession is primarily caused by challenges related to patient care, difficulties in decision-making, hesitation or reluctance to take responsibility, and the impact of changes within the hospital environment. Further research conducted in the mid-20th century corroborated these findings and identified additional stressors, such as physical pain, emotional suffering, long working hours, staffing issues, and personal relationships as significant contributors to stress in nursing (17). Job burnout is closely linked to work-related stress and is defined as a psychological syndrome characterized by emotional exhaustion, cynicism or depersonalization, and a tendency to evaluate oneself negatively (18). Burnout can therefore be seen as a state of intense dissatisfaction with one's work. Given its serious implications, it is crucial to further investigate burnout and its connection to work-related stress to prevent its negative outcomes. Burnout is also assessed in terms of the degree of emotional exhaustion and depersonalization in relation to the level of personal accomplishment (19). In terms of prevalence, burnout has been associated with low turnover rates among nurses, both within departments and across healthcare settings. Work-related stress and burnout can significantly impact job satisfaction and work performance. Prolonged stress exposure often leads to burnout, which in turn affects nurses' ability to perform their jobs effectively and their overall satisfaction with their work. Therefore, it is crucial to study the relationship between work-related stress, burnout, performance, and job satisfaction. A recent study of nurses in Iran and Turkey confirmed that burnout is primarily caused by extended exposure to stress (20). Investigating this relationship within the context of Saudi Arabia could provide valuable insights. Specifically, it would be beneficial to examine the presence of work-related stress and burnout among

nurses in public, private, and university hospitals, and to explore the connection between stress and burnout across these different hospital settings.

**Significance:**

Saudi Arabia is experiencing rapid population growth, with its growth rate being more than six times that of the UK and over three times that of the USA. However, despite this demographic challenge, Saudi Arabia allocates only 4% of its Gross Domestic Product (GDP) to healthcare, which is significantly lower than the healthcare expenditure in the UK and USA. The UK spends more than double this amount as a percentage of GDP, while the USA spends nearly five times more (4). This budgetary discrepancy exacerbates the challenges faced by Saudi Arabia’s healthcare sector, particularly in comparison to developed nations, underscoring the resource scarcity within the healthcare system. Additionally, when comparing nurse-to-population ratios, Saudi Arabia lags significantly behind both the USA and the UK. For every 10,000 people, the USA and UK employ more than 94 nurses, while Saudi Arabia employs only 21 nurses. This disparity results in a workload that is more than four times higher for nurses in Saudi Arabia compared to their counterparts in the UK or USA. Given these circumstances, one of the direct effects of work-related stress among nurses in Saudi Arabia is a negative impact on the quality of patient care. Stress-related outcomes such as absenteeism, high turnover rates, reduced commitment to work, impaired performance and productivity, as well as increased unsafe working practices and accident rates, are common. Nurses who experience chronic stress are more likely to adversely affect others in the organization and potentially cause harm to patients (21). Therefore, it is crucial to establish concrete evidence on how work-related stress and burnout influence nurses' performance and job satisfaction. This study is essential not only for reviewing policies and procedures but also for informing healthcare stakeholders about the potential consequences of work-related stress, especially among ICU nurses.

**Purpose of the study:**

To study the effect of work-related stress and burnout on nursing performance and job satisfaction

**Research Questions:**

What is the relationship between work stress, nursing performance and job satisfaction?  
 What is the relationship between burnout, nursing performance and job satisfaction?

**MATERIAL AND METHODS**

**Research Design:** The descriptive design was used to conduct the current study.

**Subjects:**

	Saudi nurses	Foreign nurses	Total
ICU	11	37	48
PICU	8	22	30
NICU	16	38	54

	Shifts per day	Total working hrs. per month
ICU	3	180
PICU	3	180
NICU	3	180

**Sample:** A convenient sample of 132 nurses was recruited for the study. 82 female and 51 male.

**Calculation of Sample Size:** the researchers used the Epi statistical program from the Open-Source Statistics for Public Health. The assumptions were: a two-sided confidence level of 95% = (1- α); a power (1- β) or (% chance of detecting) of 80%; ratio of sample size.

**Setting:** The study participants were selected from ICU, NICU, PICU, Qurrayat general hospital, Qurrayat city, Jouf, KSA. It is the only general hospital in the city thus serving all susceptible critically ill patients.

**Maneuver of Intervention:**

The filed work was conducted from February 2021 to March 2021. The current study was carried out in 2 consecutive phases, namely preparatory and implementation phase.

**Preparatory Phase:**

An extensive reviewing of electronic data related to study area was done. A review of literature to collect relevant knowledge pertinent to study was also used in developing data collection instruments.

**Implementation Phase.**

Data were collected at this phase by disseminating data collection instruments to participants through social media groups after formulating the instruments through google documents to facilitate communication and to consider protective COVID-19 measures of prevention.

#### **Instruments:**

five instruments were used for data collection: an interviewing questionnaire, Oldenburg burnout inventory (OBI) scale, work-related stress questionnaire, McCloskey/Mueller satisfaction scale (MMSS) and nursing performance checklist.

#### **I: The interviewing questionnaire:**

To evaluate socio-demographic data and occupational experience. This instrument was developed by the researchers and submitted to validity and reliability tests.

#### **II. Oldenburg burnout inventory (OBI) scale**

After reviewing and comparing various tools to measure burnout among nurses, the most valid and reliable instrument identified was the Oldenburg Burnout Inventory (OBI), which has been recommended and validated in numerous studies, particularly through validity analysis conducted for this tool (22). This scale, acquired from the British Medical Association (22) assesses burnout using two primary dimensions: exhaustion and disengagement. The instrument consists of ten questions, with responses recorded using the following scoring system: (1 = 4, 2 = 3, 3 = 2, 4 = 1). Higher scores on this scale indicate greater levels of exhaustion and disengagement.

#### **III. Work-related stress questionnaire**

The Work Stress Questionnaire (WSQ) was developed by (23) as a self-administered tool designed to identify individuals at risk of being sick-listed due to work-related stress. The questionnaire has been tested for reliability and face validity, particularly among women, with satisfactory results. The WSQ consists of 21 items that address four main themes:

1. Indistinct organization and conflicts
2. Individual demands and commitment
3. Influence at work
4. Work-to-leisure time interference

The first two themes are answered using three options: Yes, Partly, or No. To assess the stressfulness of these items, respondents are asked, "Do you perceive it as stressful?" with the following possible responses: Not stressful, less stressful, Stressful, or Very stressful. The remaining two themes are answered using a five-point scale: Yes, always; Yes, often; No, rarely; or No, never. Additionally, demographic data regarding employment, age, and educational level are also collected. This tool aids in identifying stress levels and potential risk factors related to work stress.

#### **IV. McCloskey/Mueller satisfaction scale (MMSS)**

The tool consists of 31 items across 8 domains: satisfaction with extrinsic rewards, scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility. The scale is based on a 5-point Likert format, where 5 represents "very satisfied," 3 indicates "neither satisfied nor dissatisfied," and 1 signifies "very dissatisfied." The scoring and interpretation are based on the summed items within each subscale.

A systematic review of instruments measuring job satisfaction found that seven tools met the validity criteria, with the MMSS standing out as the most appropriate for nurses working in hospitals. This tool not only met the critical aspect of specificity for this population but also showed the highest reliability and validity indicators among the tools used for this target group (24). Therefore, the MMSS was selected to measure job satisfaction among nurses.

#### **V. Nursing Performance Checklist**

The instrument used in this study was developed by the researchers and underwent validity and reliability testing. It consists of ten questions designed to assess nursing performance, with three response options: "I'm not confident doing this," "I can do this already," and "I can help others learn this."

#### **Validity:**

The validity of the instrument was established through review by a panel of subject matter experts, including both medical and nursing staff. These experts evaluated the instrument for content validity, ensuring the questions were relevant and comprehensive. They also assessed the clarity and completeness of the items. Based on their feedback, any suggestions for improvement were incorporated into the final version of the instrument.

#### **Reliability:**

To assess the reliability of the instrument, the researchers employed a test-retest method, which is commonly used to evaluate internal consistency. The same instrument was administered to the same

group of participants on two or more occasions under similar conditions. The scores from these repeated tests were then compared to ensure consistency.

**Ethical Consideration:**

Before data collection, participants were provided with a clear explanation of the study's aims and significance. Informed verbal consent was obtained from all participants, who were assured that their responses would remain confidential and would only be used for the purposes of the study.

**Piloting the Instruments:**

A pilot test was conducted with ten nurses to assess the feasibility of the data collection tools and to estimate the time required for data collection. Based on the results from the pilot test, the researchers refined the interview schedule and made adjustments to the questionnaire as necessary to ensure clarity and applicability.

**Statistical Data Analysis:**

Data collected during the study were organized and analyzed using the Statistical Package for the Social Sciences (SPSS) version 20, on an IBM-compatible computer. Quantitative data were presented as means and standard deviations ( $X \pm SD$ ) and were analyzed using the student's t-test to compare two groups with normally distributed variables, and the Mann-Whitney test for non-normally distributed variables. Qualitative data were expressed as frequencies and percentages, and analyzed using chi-square tests, Pearson correlation, repeated measures tests, independent t-tests, and the Friedman test. Statistical significance was determined using a p-value threshold of 0.05, where a p-value greater than 0.05 was considered statistically insignificant (NS), a p-value of 0.05 or less was considered statistically significant (S), and a p-value of 0.001 or less was considered highly statistically significant (HS).

**RESULTS**

The current study aimed to investigate the impact of work-related stress and burnout on nursing performance and job satisfaction. This section presents the findings from the analysis of responses from the participating nurses.

A total of 132 nurses participated in the study. Table 1 outlines the sociodemographic characteristics of the study participants. The average age of the participants was 32.13 years, with a standard deviation of 5.26. In terms of gender distribution, 61.7% (n=82) of the participants were female, while 38.3% (n=51) were male. Regarding years of experience, the largest group consisted of nurses with less than 5 years of experience, representing 42.1% (n=56) of the sample. This was followed by nurses with over 10 years of experience, comprising 35.3% (n=47). The smallest group included nurses with 5 to 10 years of experience, making up 22.6% (n=30).

**Table 1: The sociodemographic characteristics of the study participants**

Variable	M $\pm$ SD	F(%)	Range (Min-Max)
Age	32.13 $\pm$ 5.26		(21-44)
Gender			
1. Female		82(61.7)	
2. Male		51(38.3)	
Years of Experience			-----
1. Less than 5 years		56(42.1)	
2. 5 - 10 years		30(22.6)	
3. More than 10 years		47(35.3)	

The results presented in Table 2 show the mean and standard deviation scores of the nurses' responses to the Oldenburg Burnout Inventory (OBI). The findings revealed that the third item, "It happens more and more often that I talk about my work in a negative way," received the highest score, with a mean of 2.60 and a standard deviation of 0.843. This was followed by the ninth item, "Over time, one can become disconnected from this type of work," with a mean score of 2.34 and a standard deviation of 0.628. The eighth item, "During my work, I often feel emotionally drained," ranked third with a mean of 2.31 and a standard deviation of 0.782.

The sixth item, "Lately, I tend to think less at work and do my job almost mechanically," ranked fourth with a mean score of 2.22 and a standard deviation of 0.724. It was followed by the tenth item, "After working, I have enough energy for my leisure activities," which had a mean of 2.09 and a standard deviation of 0.824.

The second item, "There are days when I feel tired before I arrive at work," ranked sixth with a mean score of 2.05 and a standard deviation of 0.731. The fifth item, "I can tolerate the pressure of my work

very well," was ranked seventh with a mean score of 1.84 and a standard deviation of 0.657. The fourth item, "After work, I tend to need more time than in the past in order to relax and feel better," ranked eighth with a mean of 1.81 and a standard deviation of 0.687. The first item, "I always find new and interesting aspects in my work," was ranked ninth, with a mean of 1.77 and a standard deviation of 0.638. Finally, the lowest-ranked item was the seventh statement, "I find my work to be a positive challenge," with a mean of 1.71 and a standard deviation of 0.680. Overall, the results indicated a moderate level of burnout among nurses, with the total scale showing a mean of 2.08 and a standard deviation of 3.26.

**Table 2: Means and Standard deviations of Oldenburg Burnout Inventory (OBI)**

	Item	M ±SD	Rank
1	I always find new and interesting aspects in my work	1.77±.638	9
2	There are days when I feel tired before I arrive at work	2.05±.731	6
3	It happens more and more often that I talk about my work in a negative way	2.60±.843	1
4	After work, I tend to need more time than in the past in order to relax and feel better	1.81±.687	8
5	I can tolerate the pressure of my work very well	1.84±.657	7
6	Lately, I tend to think less at work and do my job almost mechanically	2.22±.724	4
7	I find my work to be a positive challenge	1.71±.680	10
8	During my work, I often feel emotionally drained	2.31±.782	3
9	Over time, one can become disconnected from this type of work	2.34±.628	2
10	After working, I have enough energy for my leisure activities	2.09±.824	5
	<b>Total scale</b>	<b>2.08±3.26</b>	

The results presented in Table 3 show the mean and standard deviation scores of the nurses' responses to the Work-Related Stress Scale. The highest-ranked item was the fourth statement, "I am subject to personal harassment in the form of unkind words or behaviors," with a mean score of 4.39 and a standard deviation of 1.04. This was followed by the tenth item, "I have a say in my own work speed," with a mean score of 3.67 and a standard deviation of 1.04. The third-ranked item was the seventh statement, "If work gets difficult, my colleagues will help me," with a mean score of 3.63 and a standard deviation of 1.12. The first item, "I am clear what is expected of me at work," ranked fourth with a mean of 3.43 and a standard deviation of 1.22. The fifth item was the eighth statement, "I am given supportive feedback on the work I do," which had a mean of 3.27 and a standard deviation of 1.32, followed by the second item, "I can decide when to take a break," with a mean score of 3.18 and a standard deviation of 1.19. The seventh-ranked item was the ninth statement, "I have to work very intensively," which had a mean of 3.16 and a standard deviation of 1.07. This was followed by the third item, "Different groups at work demand things from me that are hard to combine," which scored a mean of 2.69 and a standard deviation of 0.854. The ninth item was the sixth statement, "I have unachievable deadlines," with a mean score of 2.18 and a standard deviation of 0.962. The lowest-ranked item was the fifth statement, "I am subject to personal harassment in the form of unkind words or behaviors," which had a mean score of 2.07 and a standard deviation of 0.962. Overall, the results indicated a high level of work-related stress among nurses, with the total scale showing a mean score of 3.18 and a standard deviation of 5.00.

**Table 3: Means and Standard deviations of Work-Related Stress Scale**

	Item	M ±SD	Rank
1	I am clear what is expected of me at work	3.43±1.22	4
2	I can decide when to take a break	3.18±1.19	6
3	Different groups at work demand things from me that are hard to combine	2.69±.854	8
4	I know how to go about getting my job done	4.39±1.04	1
5	I am subject to personal harassment in the form of unkind words or behaviors	2.07±.962	10
6	I have unachievable deadlines	2.18±.962	9
7	If work gets difficult, my colleagues will help me	3.63±1.12	3
8	I am given supportive feedback on the work I do	3.27±1.32	5
9	I have to work very intensively	3.16±1.07	7
10	I have a say in my own work speed I have a say in my own work speed	3.67±1.04	2
	<b>Total scale</b>	<b>3.18±5.00</b>	

The results presented in Table 4 display the mean scores and standard deviations for nurses' responses to the Nursing Satisfaction Scale. The highest level of satisfaction was related to the flexibility in scheduling weekends off, which had a mean score of 4.01 and a standard deviation of 1.08. This was followed by satisfaction with weekends off per month (mean = 3.92, SD = 1.04), the opportunity for part-time work (mean = 3.88, SD = 1.01), and satisfaction with salary (mean = 3.87, SD = 1.11). Other areas of

high satisfaction included compensation for working weekends (mean = 3.86, SD = 1.07), flexibility in work scheduling (mean = 3.79, SD = 0.967), vacation (mean = 3.65, SD = 1.17), and the opportunity to work straight days (mean = 3.54, SD = 1.08). Satisfaction with the benefits package (including insurance and recruitment) scored a mean of 3.51 and a standard deviation of 1.17, while satisfaction with working hours had a mean of 3.50 and a standard deviation of 1.19. Overall, the total nursing satisfaction scale indicated a high level of job satisfaction among the participating nurses, with a mean score of 3.76 and a standard deviation of 7.55.

**Table 4: Means and Standard deviations of Satisfaction Scale**

	Item	M ±SD	Rank
1	Salary	3.87±1.11	4
2	Vacation	3.65±1.17	7
3	Benefits package (insurance, recruitment)	3.51±1.17	9
4	Hours that you work	3.50±1.19	10
5	Flexibility in scheduling your work	3.79±.967	6
6	opportunity to work straight days	3.54±1.08	8
7	opportunity for part time work	3.88±1.01	3
8	weekends off per month	3.92±1.04	2
9	flexibility in scheduling your weekends off	4.01±1.08	1
10	compensation for working weekends	3.86±1.07	5
	<b>Total scale</b>	<b>3.76±7.55</b>	

The results presented in Table 5 display the mean scores and standard deviations for nurses' responses to the Nursing Performance Checklist. The highest ranked item was "Treat colleagues fairly and with respect," which had a mean score of 2.06 and a standard deviation of 0.384. This was followed by "Act to eliminate negative behavior in the workplace" (mean = 2.05, SD = 0.481), and "Provide constructive feedback to nurses and midwives" (mean = 2.03, SD = 0.468). Other key items included "Accept responsibility for your own practice, ensuring you personally maintain codes of conduct and ethics, and actively participate in performance improvement and management activities" (mean = 2.02, SD = 0.451) and "Report unsafe or unprofessional practice or negative workplace behavior when you observe it" (mean = 2.01, SD = 0.651). Additional items such as "Use professional standards to promote best practice within the healthcare team and act as a role model" (mean = 2.00, SD = 0.452), and "Support other nurses, midwives, or healthcare providers who report unsafe or unprofessional practice" (mean = 1.98, SD = 0.563) followed closely behind.

Further down the list were "Identify and address barriers that impede your own or colleagues' workplace performance" (mean = 1.96, SD = 0.477), "Take appropriate action if you are the target of negative workplace behavior" (mean = 1.95, SD = 0.490), and finally, "Provide on-the-job training or mentoring to meet any skills gaps" (mean = 1.94, SD = 0.481). Overall, the total nursing performance scale had a mean score of 2.01 and a standard deviation of 2.57, indicating a moderate level of nursing performance among the participants.

**Table 5: Means and Standard deviations of Nursing Performance Checklist**

	Item	M ±SD	Rank
1	Report unsafe or unprofessional practice or negative workplace behavior when you observe it	2.01±.651	5
2	Take appropriate action if you are the target of negative workplace behavior	1.95±.490	9
3	Accept responsibility for your own practice, ensuring you personally maintain codes of conduct and ethics, and actively participate in performance improvement and management activities	2.02±.451	4
4	Treat colleagues fairly and with respect, behaving in a reasonable and fair manner, establishing and maintaining effective, collaborative working relationships with other members of the health care team	2.06±.384	1
5	Use professional standards to promote best practice within the health care team and act as a role model for other nurses, midwives and members of the health care team	2.00±.452	6
6	Act to eliminate negative behavior in the work place	2.05±.481	2
7	Support other nurses, midwives or health care providers who report unsafe or unprofessional practice and negative workplace behavior	1.98±.563	7
8	Identify and address barriers that impede your own or your immediate colleagues' workplace performance, directly (within your capacity) and by reporting to relevant managers	1.96±.477	8
9	Provide on the job training or mentoring to meet any skills gaps causing unsafe or unprofessional practice	1.94±.481	10
10	Provide constructive feedback to nurses and midwives in your work group about their clinical practice	2.03±.468	3
	Total scale	2.01±2.57	

The results presented in Table 6 show the Pearson correlation coefficient values between nurses' burnout, work-related stress, nursing performance, and job satisfaction. The key findings are as follows:

- **\*\*Burnout and Work-related Stress\*\***: There was a statistically significant positive correlation between nurses' burnout and work-related stress ( $r = 0.258$ ,  $p = 0.003$ ). This indicates that as burnout levels increase, work-related stress also tends to increase.

- **\*\*Burnout and Nursing Performance\*\***: There was a statistically significant positive correlation between nurses' burnout and nursing performance ( $r = 0.261$ ,  $p = 0.002$ ). This suggests that higher burnout levels are associated with higher nursing performance, which may be explained as nurses coping with burnout by overcompensating with increased work efforts.

- **\*\*Work-related Stress and Nursing Performance\*\***: A statistically significant positive correlation was found between work-related stress and nursing performance ( $r = 0.223$ ,  $p = 0.010$ ). This indicates that higher levels of work-related stress may drive nurses to work harder, although it could also contribute to longer-term burnout and reduced performance.

These correlations suggest a complex relationship between burnout, work-related stress, and nursing performance, where increased stress and burnout are linked to higher performance, possibly as a coping mechanism, even though these factors can have negative long-term effects on health and job satisfaction.

**Table 6: Pearson's Correlation Coefficients between nurses' burnout, stress, performance and satisfaction**

Variable		Burnout	Stress	Satisfaction	Performance
Burnout	Pearson Correlation	1	.258**	-.170	.261**
	Sig. (2-tailed)		.003	.051	.002
	N	132	132	132	132
Stress	Pearson Correlation	.258**	1	-.029	.223*
	Sig. (2-tailed)	.003		.739	.010
	N	132	132	132	132
Satisfaction	Pearson Correlation	-.170	-.29	1	.116
	Sig. (2-tailed)	.051	.739		.182
	N	132	132	132	132
Performance	Pearson Correlation	.261**	.223*	.116	1
	Sig. (2-tailed)	.002	.010	.182	
	N	132	132	132	132
* Correlation is significant at the 0.01 level (2-tailed)					
** Correlation is significant at the 0.05 level (2-tailed)					

## DISCUSSION

The present study aimed to investigate the effect of work-related stress and burnout on nursing performance and job satisfaction. The results indicated that most participants were female nurses, likely due to the researchers' access to their contact information. The mean age of the participants was in the thirties, a typical age range for employees, particularly since the nursing profession in Saudi Arabia has seen an influx of new graduates from local universities over the past decade. Additionally, the participants generally had less than 10 years of experience, aligning with their age group.

The study revealed a moderate level of burnout among the nurses, with the most commonly reported symptoms being negative discussions about work, emotional disconnection from work, and feelings of emotional exhaustion. These burnout levels might be linked to the challenging conditions faced by healthcare workers, especially nurses, during the COVID-19 pandemic, which has been widely reported to cause significant exhaustion across the healthcare workforce. These findings align with the results of (25), who found moderate burnout levels among Saudi nurses. However, they differ from those of (26), who reported a high level of burnout. This discrepancy may be due to the different time periods of the studies, with (26) conducting their study during a non-crisis period, while this study was conducted during the COVID-19 pandemic. Additionally, the study showed a high level of work-related stress among Saudi nurses, likely due to the high workload and crowded wards during the COVID-19 crisis. The study targeted nurses in public hospitals, where such factors are particularly pronounced, contributing to elevated stress levels. These results are consistent with (27), who reported high stress levels among ICU nurses in Saudi Arabia. However, the findings contrast with those of (28), who reported moderate stress levels among Saudi nurses working in public hospitals in Qassim City. The study also found a high level of job satisfaction among the nurses, particularly in areas like weekend scheduling, part-time opportunities, and salary. This high satisfaction may be attributed to the benefits and work schedule flexibility offered to

nurses in the healthcare sector. These results are consistent with (29), who reported high job satisfaction among Saudi nurses in tertiary medical centers. However, they contradict (32), who found low job satisfaction among nurses in critical care units in Mecca City. Furthermore, the study revealed a moderate level of performance among the participating nurses. This moderate performance could be attributed to the stress and pressure nurses faced during the pandemic, limiting their ability to perform at their best. This finding is in line with (30), who reported moderate performance levels among Saudi nurses. The study also identified a significant positive correlation between burnout and work-related stress. This correlation can be explained by the psychological impact of burnout on nurses' mental health. As nurses face increasing stress due to the challenging conditions of the COVID-19 pandemic, their burnout levels rise, consequently increasing their stress levels. This finding is consistent with (27), who reported that burnout significantly increases work-related stress among Saudi nurses. However, there are no studies providing evidence of a negative correlation between burnout and work-related stress. Finally, the study found that both burnout and work-related stress significantly increased job performance among the nurses, which is surprising since burnout and stress are generally expected to reduce efficiency. A potential explanation for this finding is that increased burnout and stress might act as motivators for nurses to work harder, possibly as a coping mechanism to deal with heightened levels of exhaustion. This result contrasts with (31), who found that burnout significantly decreased nursing performance.

## CONCLUSION

Based on the current study findings, it can be concluded that the present study findings succeeded to answer both research questions:

What is the relationship between work stress, nursing performance and job satisfaction?

What is the relationship between burnout, nursing performance and job satisfaction?

There was a moderate level of burnout, high level of work-related stress, high level of job satisfaction, and a moderate level of job performance among Saudi nurses. In addition, the present study reported that burnout is positively associated with high levels of stress, and both burnout and work-related stress are positively correlated to the job performance.

## RECOMMENDATIONS

Based on the results of the present study, the following are recommended:

Replication of the current study using more larger sample to generalize the findings

Increasing the nurses' knowledge and awareness about the coping mechanism that enable them to adapt the stressful situations

Provide them with sufficient training to improve their adaptation to the crisis's events.

In addition, the study recommends the policy makers in the healthcare sector to improve the job status of the nursing staff in Saudi Arabia.

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