The Level of Burnout among Nurses and its effect on Job Satisfaction: An Analytical study in Saudi Arabia

Abdullah.T Aldhafeeri

Abdulrahman Saeed

Youssef Majed

And

Abdulhadi Hdayan

Abstract

Because nursing is one of the most demanding occupations, occupational burnout is a typical occurrence among nurses. Nurse productivity is significantly impacted by job happiness, which in turn affects the quality of the healthcare provided. The study's objective is to ascertain the connection between burnout and job satisfaction among nurses in Hafar Al-batin using a descriptive quantitative cross-sectional approach. 334 nurses were chosen at random from five hospitals in Hafar Al-Batin. In order to measure job satisfaction, the study used questionnaires with three sections: demographics, the Maslach Burnout Inventory (MBI), and the Minnesota Satisfaction Questionnaire (MSQ), which has 20 items. According to this study, the MBI's typical score is at a moderate level. Emotional Exhaustion (EE) had the highest mean score across all aspects, followed by Personal Accomplishment and Depersonalization. The average job satisfaction score is moderate. Both burnout and job satisfaction showed an insignificant relationship, as did the relationship between EE and job satisfaction. There was an insignificant correlation between DP and job satisfaction and an insignificant correlation between PA and job satisfaction. Therefore, the hypothesis was accepted because there was no correlation between burnout and job satisfaction among nurses working in Hafar Al-batin. Nursing administrators in particular should take into account the causes of job dissatisfaction and burnout and work to eliminate them by developing and putting into practice beneficial policies and procedures. Increased continuing education programs for nurses, particularly those that deal with stress and conflict management, strengthening coping mechanisms, enhancing personal skills and achievements, and updating knowledge, are additional issue that needs to be addressed.

Keywords: *Burnout; Job Satisfaction; Nursing; Quality of care.*

1. Introduction

Because nursing is one of the most demanding occupations, occupational burnout is a typical emotion among nurses. The frequent demands and conditions at work brought on by the unfavorable working conditions are what causes the stress experienced by the nursing staff. In consequence, this endangers the nurses' well-being and contributes to their burnout. The energy level of nurses at work declines when they are burned out. This can be seen in the nurses' diminished effectiveness due to a lack of drive, a sense of frustration, and emotional tiredness (Mudallal et al., 2017).

In Saudi Arabia, nurses may leave their jobs due to burnout and a lack of pleasure with their work. The link between burnout and job satisfaction is crucial, and this problem is made worse by a lack of knowledge and information. Burnout and job satisfaction are both workplace occurrences, thus this study will look into how they are related. There was no research on job satisfaction and burnout at hospitals in small cities, as most earlier studies in the Kingdom of Saudi Arabia concentrated on the major cities. Because the hospital working environment in small cities in Saudi Arabia (SA) is different from that in large cities in SA, this study looks at job satisfaction and burnout among nurses who work in such hospitals. The issue of burnout among the Saudi nurses in Hafar Al-batin must be addressed, and a solution must be found.

1.1 The Objectives of Study

The study's objective is to ascertain the connection between burnout and job satisfaction among nurses in Hafar Al-batin.

The study explicitly aims to achieve the following goals:

1. To measure the level of burnout and job satisfaction among the nurses in Hafar Al-batin.
2. To ascertain the connection between job satisfaction and burnout among nurses in Hafar Al-batin.

1.2 Study Hypotheses

The research hypotheses are:

H_{01}: There is no relationship between burnout and job satisfaction among nurses working in Hafar Al-batin.

H_{02}: There are no statistically significant differences in job satisfaction and burnout among nurses in Hafar Al-batin, Saudi Arabia.

1.3 Significance of the Study

The findings of the study are seen to be beneficial due to the following reasons. First, it will be beneficial for patients' care, where Adverse occurrences such as incorrect medicine delivery, diagnostic results, and inaccurate patient data recording can all be avoided if there are enough staff available. Second, it will be beneficial for nursing practice, where, the research can be used to identify strategies for avoiding burnout, reducing the likelihood that nurses will make mistakes, and ultimately improving nursing practice. Third, it will be beneficial for Nursing administration,

where the research can be used to identify strategies for avoiding burnout, reducing the likelihood that nurses will make mistakes, and ultimately improving nursing practice. Fourth, it will be beneficial for hospitals, where the hospitals will receive recommendations once the proper staffing strategy has been implemented based on the study's findings. This will eventually postpone the expense of potential legal issues as well as other incidental or wasteful costs brought on by insufficient staffing. Fifth, it will be beneficial for regulatory bodies, where the findings of this study may be useful to the Ministry of Health, the Saudi Patient Safety Center, and other regulatory bodies. The recommendations from this study could be taken into account as part of the provisions under the Human Resource and Nurse-Patient Ratio in audits. Finally, it will be beneficial for research, the findings of this study may be used by future researchers as a parent study or as a component of a review of relevant material.

1.4 Definition of Terms

- Burnout: In this study, the phrase "burnout" refers to a state of weariness brought on by the stress associated with nursing profession. Burnout is typically defined as the condition in which a specific nurse is unable to provide the level of care that is required due to stress (Mudallal et al (2017).

- Job Satisfaction: a mindset or emotional state toward a job that results from both good and bad job experiences, as well as how well or poorly those events, fit with the nurses' ideals or expectations (Larrabee et al. 2003).

2. Literature Review

2.1 Occupational burnout

Nurse burnout is associated with hostile occupational characteristics such as high outstanding burdens, poor staffing levels, long movements, and low control. There could be catastrophic consequences for both employees and patients. Several areas of the literature on nursing burnout partially back up Maslach's claim (Dall'Ora et al., 2020). About 32.1% of oncology nurses in Iran were found to be in the most severe stage of burnout. Depersonalization and enthusiastic weariness had a strong positive correlation with anxiety and melancholy. Character traits should be taken into consideration to prevent burnout disorder, given how character traits affect burnout measurements (Molavynejad et al., 2019).

In the US, a study investigates the areas of job pressure and burnout levels of school medical caregivers. 100 participants completed an electronic version of the MBI and Areas of Work Life Survey. This study can help school initiatives and plan developers understand the kind of work that can lead to burnout (Jameson & Bowen, 2018). In Egypt, Emotional tiredness was quite prevalent, while low personal achievement and personal attrition were less prevalent. Burnout and job discontent were associated with advancing age, provenance outside the Aswan governorate, and being single at the time of the study (Osman & Abdlrheem, 2019).

Ahmed et al. (2020) conducted a study of 227 nurses in Karachi, Pakistan. According to the findings, nurses experienced moderate burnout, and there was a significant correlation between burnout and factors such as the length of employment, professional experience, and the standard and sufficiency

of the equipment in the assigned units. According to Rosales et al. (2013), The findings revealed a statistically significant association between the respondents' levels of burnout and job satisfaction, which may have an impact on the caliber of patient care.

2.2 Job Satisfaction

A study was undertaken in Oman by Al Maqbali (2015) the findings showed that Omani nurses were generally satisfied. Additionally, it was shown that the relationship between coworkers has the greatest impact on whether or not nurses are content with their jobs. Additionally, the findings demonstrated that demographic variables like age, nationality and work shift had a statistically significant impact on nurses' job happiness, with non-Omani nurses reporting better job satisfaction than Omani nurses. A study by Ayalew et al., (2019) investigated the difficulties ICU nurses have in terms of job satisfaction. Lack of education, stress, lack of equipment, and relationships with coworkers were cited as significant obstacles to job satisfaction by participants.

Nurses who work in a supportive environment are less likely to consider leaving their position, according to a new study. The researchers came to the conclusion that by implementing a system that increases nurses' job satisfaction, working conditions and nurse retention could be improved (AlSabei et al., 2019). A study has suggested that good pay and promotion could help nurses feel more content with their profession. The study found that nurses' happiness had a favorable impact on their performance, as well as their willingness to put extra time and effort into their work (Karem et al., 2019).

Torlak et al., (2021) found that burnout, planned behavior of nurses, contentment, and organizational behavior of nurses in Iraq are related. The results of the study's 428 nurse survey indicated that the nurses' attitudes had a favorable impact on both burnout and overall satisfaction. Burnout is also impacted by perceived behavioral control, but burnout has a negative impact on citizenship behavior. Last but not least, it was discovered that job satisfaction positively influenced civic behavior.

Saudi nurses have moderate to high levels of professional burnout and moderate levels of job satisfaction, a study has found (Alzailai et al., 2021). A recent study examined the burnout of international nurses in Saudi Arabia and found that satisfaction at work was found to be inversely connected with the onset of burnout symptoms (Batayneh et al., 2019).

3. Conceptual Framework

Depends on the literature review, three variables were determined. The conceptual framework for the study is shown in the image below. The respondents' demographic profile is shown in the upper box. The additional study variables are shown by the two boxes at the bottom, which are the nurses' job satisfaction and burnout. They are separated by a double-headed arrow to signify that their compatibility will be examined. An arrow in the demographic profile points to the double-headed arrow, indicating that the relationship between nurses' job satisfaction and burnout may be influenced by the demographic characteristics.
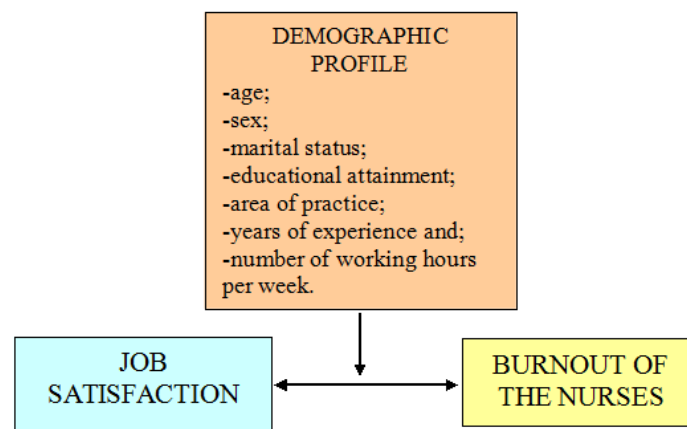

Figure 1. The conceptual framework of the study

3.1 Theoretical Framework

The conservation of resources theory and Herzberg's motivation-hygiene theory serve as the theoretical foundation for this investigation. Understanding the mechanisms involved in the feeling of stress and the coping mechanisms has been based on the conservation of resources (COR) theory. Dr. Stevan E. Hobfoll proposed it in 1989. According to the hypothesis, a specific person has a tendency to safeguard and conserve their own resources. According to the notion, stress happens when a person's resources are exhausted, threatened, or insufficient. These resources are the things that a person values, whether they take the shape of tangible possessions, energy, traits, or circumstances like sound health or steady employment. The fundamental tenet of the COR theory is that an individual is more affected by the loss of resources than the acquisition of resources. The second tenet is that an individual must make an effort to stop the loss, for example, by employing coping methods. One of the underlying assumptions of the study is that nurses who are already experiencing burnout at work tend to experience larger impacts and effects. Because persistent stress has a number of detrimental effects, nurses must develop ways to stop it from occurring.

Herzberg's two-factor theory of motivation, sometimes referred to as the motivation-hygiene hypothesis, is the second theory on which the study is predicated. Frederick Herzberg put up this theory in 1959. The notion contends that some elements contribute to an individual's contentment while others contribute to their dissatisfaction. The two elements have to do with motivation and hygiene. The factors that are required to maintain

motivation at work are hygiene factors. Simply described, hygiene considerations are elements that satisfy employees' needs and improve their level of job satisfaction. The motivators are often referred to as satisfiers. These are the motivating elements that help employees feel appreciated at work. The two-factor approach mostly applies to managers because they must control stress by making sure that the hygiene aspects are sufficient to prevent employee unhappiness. This hypothesis serves as a foundation for the study because nurse managers may place an emphasis on enhancing employee motivation so that the nursing staff would feel content and produce better work.

4. Methodology

In order to ascertain the association between job satisfaction and burnout among the nurses in Hafar Al-batin, Saudi Arabia, the study will employ a descriptive quantitative cross-sectional methodology. Since the study will both explain the nurses' level of burnout and job satisfaction and use the data as a whole to quantify it, a descriptive quantitative design will be used. With the use of this design, the researcher will be able to quantify the levels of satisfaction and burnout among the nurses working in Hafar Al-Batin, Saudi Arabia, and explain their interaction with one another.

4.1 Sample of Study

The study participants were chosen using a convenience sampling technique. The researcher will be able to choose nurses who are available to take part in the study using convenience sampling. The information was gathered at five hospitals in the Saudi Arabian city of Hafar Al-batin. These five hospitals were picked because they are general hospitals with registered nurses working in various departments and offering a variety of services.

All nurses who fit the requirements (654) received questionnaires, and 334 registered nurses who were currently employed participated in the survey, resulting in a response rate of 51.07%. The study's participants are registered nurses (with a diploma, bachelor's, or master's degree), nurses with at least one year of experience, nurses working in the Hafar Al-batin district, and nurses who have direct patient contact.

4.2 Research Instrument

The Nurses' Burnout Questionnaire (MBI) was used to gauge the nurses' levels of burnout. The MBI is regarded as the most reliable and widely used inventory to research burnout among human service employees. It has 22 items and is separated into three scales: personal accomplishment, depersonalization, and emotional exhaustion. On a 7-point rating system, 0 represents never, 1 represents a few times a year or less, 2 means a few weeks or months, 3 for a few days, and 6 for every day.

The following formula was used to determine the level:

Level of interval: (biggest number - lowest number) (number of points)

Interval level = (7 1)/7 = 0.85, resulting in a level range of very high to very low in Table 1.

Table 1 Interval level of the 7-pointLikert scale

Level	Interval
Very low	1–1.85
Low	1.86–2.71
Belowmoderate	2.72–3.57
Moderate	3.58–4.43
Above moderate	4.44–5.29
High	5.30–6.15
Very high	6.16–7.00

The scales employed a 5-point Likert scale, and the following formula was used to determine the score:

Level of interval: (biggest number - lowest number) (number of points)

Interval level = (5 1)/5 = 0.80, resulting in a level range of very high to very low in Table 2.

Table 2 Interval level of the 5-pointLikert scale

Interval level	Level
1–1.79	Very low
1.80–2.59	Low
2.60–3.39	Moderate
3.40–4.19	High
4.20–5	Very high

5. Results

5.1 Demographic Information

According to Table (3), the survey included 334 nurses who worked in the Saudi healthcare industry, with 21.6% men and 78.4% women. 48.2% Saudis and 51.8% non-Saudis made up the sample participants. Only 6% of people were separated, compared to 56.6% who were married and 37.4% who were single. Sixty-three.8% of them have bachelor's degrees. The participants worked in 10 different units, with 22.2% of them being in the emergency room. The mean age and years of experience were $33.10 + 5.10$ and $9.07 + 5.41$, respectively.

Table 3 Demographic information (N = 334).

Factor		N (%) Mean ± SD
Gender	Male	72 (21.6%)
	Female	262 (78.4%)
Nationality	Saudi	161 (48.2%)
	Non Saudi	173 (51.8%)
Marital Status	Single	125 (37.4%)
	Married	189 (56.6%)
	Separated	20 (6%)
Qualifications	Diploma	86 (25.7%)
	Bachelor	213 (63.8%)
	Postgraduate degrees	35 (10.5%)
	Emergency Department	74 (22.2%)
	Artificial Kidney Unit	11 (3.3%)
	ICUs	52 (15.6%)
	Medical Department	29 (8.7%)
	Nursing Administration	41 (12.3%)
	Nursing Education	14 (4.2%)
	Obstetric Department	25 (4.5%)
	Operating Room	23 (6.9%)
	Outpatient Department	27 (8.1%)
	Surgical Department	38 (11.4%)
Age		33.10 ± 5.10
Years of experience		9.07 ± 5.41

5.2 Normality

Before continuing with the study, the distribution of the data must be taken into account. A one-sample Kolmogorov-Smirnov test was carried out to examine the normality, as shown in Table (4). The independent t-test, one-way ANOVA, and Pearson correlations were used to analyze burnout, while the Mann-Whitney test, Kruskal-Wallis, and Spearman's were used to analyze work satisfaction because it was not normally distributed (p 0.05).

Table 4 One-Sample Kolmogorov–Smirnov Test (N = 334)

	Burnout	Job Satisfaction
Kolmogorov–Smirnov Z	0.97	2.47***
p-value	0.30	0.000
* p<0.05,**p<0.01, ***p<0.001		

5.3 Descriptive Analysis of the MBI

MBI was evaluated in three dimensions using a 7-point Likert scale (the highest value = 7 to the lowest value = 1), as indicated in Table (5) and Figure (2). The MBI's mean score was (3.63 ± 1.14; a moderate level). EE had the highest mean score across all dimensions (4.11 ± 1.37/moderate level), followed by PA (3.39 ± 1.32/below moderate level), and DP (3.38 ± 1.35/below moderate level). It can be concluded that there was a moderate amount of burnout among nurses.

Table 5 Descriptive analysis of the MBI (N = 334)

Statement	N/%	1	2	3	4	5	6	7	Mean ± SD
1. I feel emotionally drained from work.	N	20	39	56	100	43	34	42	4.13 ± 1.68
	%	6.0	11.7	16.8	29.9	12.9	10.2	12.6	
2. I feel used up at the end of the workday.	N	10	39	71	82	42	40	50	4.28 ± 1.68
	%	3.0	11.7	21.3	24.6	12.6	12.0	15.0	
3. I feel fatigued when get up in the morning.	N	14	47	73	73	40	41	46	4.15 ± 1.73
	%	4.2	14.1	21.9	21.9	12.0	12.3	13.8	
4. I feel like at the end of the rope.	N	17	43	63	93	52	32	34	4.05 ± 1.62
	%	5.1	12.9	18.9	27.8	15.6	9.6	10.2	
5. I feel burned out from work.	N	8	46	70	67	53	36	54	4.30 ± 1.71
	%	2.4	13.8	21.0	20.1	15.9	10.8	16.2	
6. I feel frustrated by job.	N	16	56	61	64	71	26	40	4.07 ± 1.70
	%	4.8	16.8	18.3	19.2	21.3	7.8	12.0	
7. I feel working too hard on the job.	N	5	50	74	61	45	44	55	4.33 ± 1.73
	%	1.5	15.0	22.2	18.3	13.5	13.2	16.5	
8. Working with people puts too much stress to me.	N	23	58	61	76	34	47	35	3.96 ± 1.76
	%	6.9	17.4	18.3	22.8	10.2	14.1	10.5	
9. Working with people is a strain to me.	N	32	65	62	70	47	30	28	3.71 ± 1.73
	%	9.6	19.5	18.6	21.0	14.1	9.0	8.4	
Emotional exhaustion									4.11 ± 1.37 Moderate
10. I treat people as impersonal "objects."	N	74	57	63	67	32	18	23	3.22 ± 1.79
	%	22.2	17.1	18.9	20.1	9.6	5.4	6.9	
11. I become more callous towards people.	N	50	68	64	73	40	19	20	3.37 ± 1.69
	%	15.0	20.4	19.2	21.9	12.0	5.7	6.0	
12. I worry that job is hardening emotionally.	N	22	61	71	68	48	35	29	3.84 ± 1.69
	%	6.6	18.3	21.3	20.4	14.4	10.5	8.7	
13. I don't really care what happens to people.	N	85	52	69	68	31	17	12	3.02 ± 1.67
	%	25.4	15.6	20.7	20.4	9.3	5.1	3.6	
	N	40	67	71	75	33	29	19	3.47 ± 1.67

14. I feel people blame for their problems.	%	12.0	20.1	21.3	22.5	9.9	8.7	5.7	
Depersonalization									3.38 ± 1.35 Below moderate
15. I cannot easily understand feelings of people.	N	49	67	77	70	38	15	18	3.29 ± 1.62
	%	14.7	20.1	23.1	21.0	11.4	4.5	5.4	
16. I do not deal effectively with the problems of people.	N	51	74	69	66	33	21	20	3.30 ± 1.69
	%	15.3	22.2	20.7	19.8	9.9	6.3	6.0	
17. I do not feel positively influencing people's lives.	N	46	73	69	77	36	22	11	3.28 ± 1.57
	%	13.8	21.9	20.7	23.1	10.8	6.6	3.3	
18. I do not feel very energetic.	N	30	69	80	75	38	26	16	3.49 ± 1.57
	%	9.0	20.7	24.0	22.5	11.4	7.8	4.8	
19. I cannot easily create a relaxed atmosphere.	N	31	64	73	81	34	35	16	3.57 ± 1.61
	%	9.3	19.2	21.9	24.3	10.2	10.5	4.8	
20. I do not feel exhilarated after working with people.	N	32	69	75	74	41	27	16	3.50 ± 1.60
	%	9.6	20.7	22.5	22.2	12.3	8.1	4.8	
21. I do not have accomplished worthwhile things in job.	N	43	70	79	73	35	20	14	3.31 ± 1.58
	%	12.9	21.0	23.7	21.9	10.5	6.0	4.2	
22. I do not deal with emotional problems calmly.	N	36	76	72	73	42	17	18	3.40 ± 1.60
	%	10.8	22.8	21.6	21.9	12.6	5.1	5.4	
Personal Accomplishment									3.39 ± 1.32 Below moderate
MBI(Average)									**3.63 ± 1.14 Moderate**

5.4 Descriptive Analysis of Job Satisfaction

According to Table (6), 20 items were used to gauge satisfaction on a 5-point Likert scale (highest = 5; lowest = 1). All the items received a moderate level, with the average score for job satisfaction being (2.90 0.71/moderate). The highest mean score was for item (3), "The opportunity to occasionally do something different," followed by item (4), "The opportunity to be "somebody" in the community," (3.02 0.96), and item (1), "Being able to keep busy all the time," while item 13 ("My pay and the amount of work I do") received the lowest mean score (2.72 1.07). It can be said that nurses had a modest level of job satisfaction.

Table 6 Descriptive analysis of job satisfaction (N = 334)

Statement	N/%	1	2	3	4	5	Mean ± SD
1. Being able to keep busy all the time.	N	25	61	168	49	31	3.00 ± 1.00
	%	7.5	18.3	50.3	14.7	9.3	
2. The chance to work alone on the job.	N	37	62	151	63	21	2.91 ± 1.03
	%	11.1	18.6	45.2	18.9	6.3	
3. The chance to do different things from time to time.	N	11	78	162	56	27	3.03 ± 0.93
	%	3.3	23.4	48.5	16.8	8.1	
4. The chance to be "somebody" in the community.	N	15	78	153	62	26	3.02 ± 0.96
	%	4.5	23.4	45.8	18.6	7.8	
5. The way my boss handles his/her workers.	N	36	93	120	60	25	2.84 ± 1.08
	%	10.8	27.8	35.9	18.0	7.5	
6. The competence of my supervisor in making decisions.	N	41	75	134	56	28	2.87 ± 1.10
	%	12.3	22.5	40.1	16.8	8.4	
7. Being able to do things that don't go against my conscience.	N	27	82	151	46	28	2.90 ± 1.02
	%	8.1	24.6	45.2	13.8	8.4	
8. The way my job provides for steady employment.	N	20	75	160	53	26	2.97 ± 0.97
	%	6.0	22.5	47.9	15.9	7.8	

9. The chance to do things for other people.	N	20	77	151	55	31	3.00 ± 1.00
	%	6.0	23.1	45.2	16.5	9.3	
10. The chance to tell people what to do.	N	22	74	158	53	27	2.97 ± 0.98
	%	6.6	22.2	47.3	15.9	8.1	
11. The chance to do something that makes use of my abilities.	N	21	78	138	69	28	3.01 ± 1.01
	%	6.3	23.4	41.3	20.7	8.4	
12. The way company policies are put into practice.	N	33	84	141	54	22	2.84 ± 1.03
	%	9.9	25.1	42.2	16.2	6.6	
13. My pay and the amount of work I do.	N	49	86	129	51	19	2.72 ± 1.07
	%	14.7	25.7	38.6	15.3	5.7	
14. The chances for advancement on this job.	N	27	86	144	54	23	2.88 ± 1.00
	%	8.1	25.7	43.1	16.2	6.9	
15. The freedom to use my own judgment.	N	27	95	126	58	28	2.90 ± 1.05
	%	8.1	28.4	37.7	17.4	8.4	
16. The chance to try my own methods of doing the job.	N	33	84	140	54	23	2.85 ± 1.03
	%	9.9	25.1	41.9	16.2	6.9	
17. The working conditions.	N	35	99	137	43	20	2.74 ± 1.01
	%	10.5	29.6	41.0	12.9	6.0	
18. The way my co-workers get along with each other.	N	17	109	129	48	31	2.90 ± 1.02
	%	5.1	32.6	38.6	14.4	9.3	
19. The praise I get for doing a good job.	N	34	91	132	53	24	2.83 ± 1.05
	%	10.2	27.2	39.5	15.9	7.2	
20. The feeling of accomplishment I get from the job.	N	31	88	137	52	26	2.86 ± 1.04
	%	9.3	26.3	41.0	15.6	7.8	
Job satisfaction							**2.90 ± 0.71** **Moderate**

Burnout and job satisfaction among nurses working in Hafar Al-batin are unrelated.

Table (7) demonstrates that the results of the normality tests were used to determine Spearman and Pearson's correlations.

Burnout and job satisfaction had a negligible link ($r = 0.03$, $p>0.05 = 0.64$) while EE and job satisfaction had a negligible correlation ($r = 0.07$, $p>0.05 = 0.22$). DP and job satisfaction showed no significant correlation ($r = 0.10$, $p>0.05 = 0.08$), and PA and job satisfaction showed no significant correlation ($r = 0.04$, $p>0.05 = 0.49$). Therefore, H01 was approved because there was no correlation between burnout and job satisfaction among nurses working in Hafar Al-batin.

5.5 Testing the Hypotheses

Burnout and job satisfaction among nurses working in Hafar Al-batin are unrelated.

Table (7) demonstrates that the results of the normality tests were used to determine Spearman and Pearson's correlations.

Burnout and job satisfaction had a negligible link ($r = 0.03$, $p>0.05 = 0.64$) while EE and job satisfaction had a negligible correlation ($r = 0.07$, $p>0.05 = 0.22$). DP and job satisfaction showed no significant correlation ($r = 0.10$, $p>0.05 = 0.08$), and PA and job satisfaction showed no significant correlation ($r = 0.04$, $p>0.05 = 0.49$). Therefore, H01 was approved because there was no correlation between burnout and job satisfaction among nurses working in Hafar Al-batin.

Table 7 The relationship between burnout and job satisfaction (N = 334)

Variables	Job satisfaction	
	r	*p*-value
Emotional exhaustion	−0.07	0.22
Depersonalization	0.10	0.08
Personal accomplishment	0.04	0.49
Burnout	0.03	0.64

5.6 Distribution of Job Satisfaction of Nurses in Terms of Demographic Factors

As seen in Table (8), the distribution of work satisfaction in terms of demographic characteristics was presented using the Mann-Whitney U test, Kruskal-Wallis test, and Spearman correlation test.

There was only one significant difference in satisfaction between the units; the Kruskal-Wallis test revealed it to be in the area of education (X2 = 21.52, p0.05 = 0.01), favoring the Nursing Education Unit, which had the highest median score (MD = 214.82), followed by Nursing Administration (MD = 196.70), and having the lowest median score (MD = 108.59), which was the Artificial Kidney Unit.

table 8 Distribution of Job Satisfaction of Nurses in Terms of Demographic Factors

Factor		Median	Statistic/p-value
Gender	Male	181.90	$U = -1.43/0.15$
	Female	163.54	
Nationality	Saudi	175.04	$U = -1.38/0.17$
	Non-Saudi	160.48	
Marital Status	Single	156.98	$X^2 = 2.78/0.25$
	Married	175.18	
	Separated	160.63	
Qualifications	Diploma	157.34	$X^2 = 3.47/0.18$
	Bachelor	163.28	
	Postgraduate degrees	194.69	
	Emergency Department	168.39	$X^2 = 21.52*/0.01$
	Artificial Kidney Unit	108.59	
	ICUs	161.99	
	Medical Department	176.03	
	Nursing Administration	196.70	
	Nursing Education	214.82	
	Obstetric Department	162.00	
	Operating Room	185.98	
	Outpatient Department	176.17	
	Surgical Department	121.18	
Age		-	$r = 0.07/0.24$
Years of experience		-	$r = 0.06/0.20$

5.7 Distribution of Burnout of Nurses in Terms of Demographic Factors

The distribution of burnout in terms of demographic characteristics was presented using the independent t-test, one-way ANOVA, and Pearson correlation tests, as indicated in Table (9). There was just one significant difference in burnout according to country, and an advantage for Saudi

Arabia with a mean score of 3.84 1.09 in the independent t-test revealed significant differences in satisfaction with education.

Table 9 The distribution of burnout of nurses in terms of their demographic factors (experience, age, gender. Education level, position, and nationality) (N = 334)

Factor		Mean ± SD	Statistic/p-value
Gender	Male	3.72 ± 1.11	$t = 0.78/0.44$
	Female	3.60 ± 1.15	
Nationality	Saudi	3.84 ± 1.09	$t = 3.32^{**}/0.001$
	Non-Saudi	3.43 ± 1.15	
Marital Status	Single	3.52 ± 0.98	$F = 1.24/0.29$
	Married	3.67 ± 1.25	
	Separated	3.89 ± 0.98	
Qualifications	Diploma	3.78 ± 1.04	$F = 0.89/0.45$
	Bachelor	3.56 ± 1.22	
	Postgraduate degrees	3.66 ± 0.91	
Unit	Emergency Department	3.76 ± 0.94	$F = 1.36/0.21$
	Artificial Kidney Unit	3.00 ± 1.01	
	ICUs	3.54 ± 1.34	
	Medical Department	3.40 ± 1.09	
	Nursing Administration	3.63 ± 1.06	
	Nursing Education	3.80 ± 1.34	
	Obstetric Department	3.95 ± 1.21	
	Operating Room	3.22 ± 1.10	
	Outpatient Department	3.60 ± 1.06	
	Surgical Department	3.83 ± 1.30	
Age		-	$r = -0.009/0.87$
Years of experience		-	$r = 0.01/0.83$

6. Discussion

The study's findings showed that the nurses who took part in it were moderately burned out. The findings of earlier studies conducted by Hu et al., (2020), in the United States by Kelly et al. (2021), in Pakistan by Ahmed et al. (2020), and in the Philippines by Rosales et al. (2013), which found that nursing burnout was moderate, are consistent with this one. The findings of this study, however, did not agree with many others that have found nurses to be highly burned out. Examples include studies conducted in the past in Saudi Arabia, Egypt, Iran, and Saudi Arabia by Alzailai et al. (2021), Shahin et al. (2020), Osman and Abdlrheem (2019), and Molavynejad et al. (2019). The fact that each hospital complied with the MOH's staff ratio guideline, which reduces the workload, is the cause for the modest degree of burnout among nurses. Despite the fact that nursing is a demanding profession, this stress was not sustained.

The study's findings for job satisfaction among the participating nurses were on average. This finding is in line with earlier research conducted in Palestine by Abushaikha and Saca Hazboun (2009), and Saudi Arabia by Golbasi et al., (2008), all of which revealed that nurses had a moderate level of job satisfaction. The findings of this study did not agree with those of some other research, which revealed that nurses in Ethiopia, Oman, and Iraq have high levels of job satisfaction. These studies were conducted by Ayalew et al. (2019), AlSabei et al. (2019), and Karem et al. (2019). The moderate level of job satisfaction among nurses working at hospitals in Hafer Al-batin can be attributed to a variety of factors. Looking at the results, we cannot disregard the fact that the study was conducted in

hospitals with 200 beds or fewer, which means that the sample consisted of primary and secondary hospitals, which are frequently not subject to the same extended stress as the large or tertiary hospitals. Some nurses practiced in primary care facilities, where they were not subjected to the same levels of work-related stress as those employed by secondary or tertiary hospitals.

The findings of this study, which were consistent with earlier research conducted in Palestine by Abushaikha and Saca Hazboun (2009), in Egypt by Osman and Abdlrheem (2019), and in Iran by Saeidi et al., (2020) showed that there is no relationship between the two concepts due to the similar results regarding job satisfaction and burnout variables, which both showed moderate levels. This result, however, did not agree with earlier research from the Philippines' Rosales et al. (2013), China's Song et al. (2020), Saudi Arabia's Batayneh et al. (2019), or Turkey's Torlak et al. (2021), which found a link between nurses' job satisfaction and burnout.

7. Conclusion

This study looked at the connection between burnout and job satisfaction among Saudi Arabian nurses working in various healthcare facilities. This influence has an impact on the nursing profession as a whole as well as health organizations. Burnout offers a clear threat to the function of nursing practice and the standard of patient care, and job unhappiness can be considered as a substantial contributor to that risk. According to the study, the nurses employed by five main and secondary hospitals in Hafar Al-Batin had moderate job satisfaction and burnout. There is no connection between them. This study found substantial disparities in burnout according on Saudi nationality, but no significant differences in job satisfaction among nurses depending on their level of education. Future research aiming to deepen our grasp of this topic might use these findings as excellent reference material. Nurse burnout can be avoided, as can the loss of future nursing talent, if healthcare organizations can create working environments that enable nurses to be productive.

By designing and implementing beneficial policies and practices, such as increasing the number of nurses in healthcare settings and lowering the nurse-patient ratio, which will reduce the nurse-patient ratio and reduce the level of burnout, healthcare administrators, especially nursing administrators, can try to eliminate the factors that contribute to job dissatisfaction and burnout. If high-quality healthcare services are to be provided moving forward, it is critical to concentrate on addressing the personal and professional demands of nursing care. Increased continuing education programs for nurses are a third issue that has to be addressed,

particularly those that deal with stress and conflict management, improve coping mechanisms, boost personal talents and successes, and update information. Finally, authorities in SA should raise the financial perks, such as salaries, and offer psychosocial support for nurses, as this is predicted to have a good impact on nurses' levels of job satisfaction and reduce burnout.

References

Abushaikha, L., & Saca Hazboun, H. (2009). Job satisfaction and burnout among Palestinian nurses. EMHJ-Eastern Mediterranean Health Journal, 15 (1), 190–197.

Ahmed, T., Shah, H., Rasheed, A., & Ali, A. (2020). Burnout among nurses working at Dow and Civil Hospitals in Karachi: A cross-sectional study. Journal of Pakistan Medical Association,70(6), 1018–1022.

Al Maqbali, M.A. (2015). Job satisfaction of nurses in a regional hospital in Oman: Across-sectional survey. The Journal of Nursing Research, 23(3), 206–216. Doi: 10.1097/jnr.0000000000000081

Al Sabei, S.D., Labrague, L.J., Ross, A.M., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N. (2019). Nursing work environment, turnover intention, job burnout and quality of care: The moderating role of job satisfaction. Journal of Nursing Scholarship, 52 (1), 95–104.

Alzalai, N., Barriball, L. &Xyrichis, A. (2021). Burnout and job satisfaction among critical care nurses in Saudi Arabia and their contributing factors: A scoping review. Nursing Open Sep; 8(5): 2331–2344. Doi: 10.1002/nop2.843

Ayalew, F., Kibwana, S., Shawula, S. et al. (2019). Understanding job satisfaction and motivation among nurses in public health facilities of Ethiopia: Across-sectional study. BMC Nursing 18 (1), 1-13. Doi: 10.1186/s12912-019-0373-8

Batayneh, M. H., Ali, S., & Nashwan, A. J. (2019). The burnout among multinational nurses in Saudi Arabia. Open Journal of Nursing,9(7), 603–61

Dall'Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: Atheoretical review. Human resources for health,18, 1–17.

Golbasi, Z., Kelleci, M., & Dogan, S. (2008). Relationships between coping strategies, individual characteristics and job satisfaction in a sample of hospital nurses: Cross-sectional questionnaire survey. International Journal of Nursing Studies, 45(12), 1800–1806.

Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., Zhu, L. X., ... & Zhu, J. (2020). Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. E Clinical Medicine,24, 1004–24.

Jameson, B. & Bowen, F. (2018). Use of work life and levels of burnout surveys to assess the school nurse work environment. The Journal of School Nursing, 36(4) 272–282. Doi: 10.1177/1059840518813697

Karem, M.A., Mahmood, Y.N., Jameel, A.S., & Ahmad, A.R. (2019). The effect of job satisfaction and organizational commitment on nurses' performance. Humanities & Social Sciences Reviews. 7 (6), 332–339. Doi: 10.18510/hssr.2019.7658 study.

Larrabee J.H., Jamney M.A., Ostrow C.L., Withrow M.L., Hobbs G.R. & Burant C. (2003) Predicting registered nurse job satisfaction and intent to leave. Journal of Nursing Administration, 33(5), 271-283.

Molavynejad, S., Babazadeh, M., Bereihi, F., &Cheraghian, B. (2019). Relationship between personality traits and burnout in oncology nurses. Journal of Family Medicine and Primary Care. 8 (9), 2898–2902.

Mudallal, R., Othman, W.M., & Al Hassan, N. (2017). Nurses' burnout: The influence of leader empowering behaviors, work conditions and demographic traits. Inquiry,.54: 1–10

Osman, D., & Abdlrheem, S. (2019). Burnout and job satisfaction among healthcare providers in Aswan University hospital, upper Egypt. Journal of High Institute of Public Health,49(1), 64–72.

Rosales, R. A., Labrague, L. J., & Rosales, G. L. (2013). Nurses 'job satisfaction and burnout: Is there a connection? International Journal of Advanced Nursing Studies,2(1),1–10.

Saeidi, R., Izanloo, A., &Izanlou, S. (2020). A study of the relationship between job satisfaction and burnout among neonatal intensive care unit staff. Iranian Journal of Neonatology IJN, 11(1), 67–70.

Shahin, M.A., Al-Duai, S.A.R., Abdoh, D.S., Alahmdai, A.S., Ali, A.K., & Hifnawy, T. (2020). Burnout among nurses working in the primary health care centers in Saudi Arabia, a multicenter study. AIMS Public Health, 7(4): 844–853. Doi: 10.3934/publichealth.2020065

Song, X., Xiang, M., Liu, Y., & Yu, C. (2020). Relationship between job satisfaction and burnout based on a structural equation model. Journal of Occupational and Environmental Medicine, 62(12), e725–e731.

Torlak, N. G., Kuzey, C., Sait Dinç, M., & Budur, T. (2021). Links connecting nurses' planned behavior, burnout, job satisfaction, and organizational citizenship behavior.Journal of Workplace Behavioral Health, 36(1), 77–103.Wang, Q. Q., Lv, W. J., Qian, R. L., & Zhang, Y. H. (2019). Job burnout and quality of working life among Chinese nurses: A cross-sectional study. Journal of Nursing Management, 27(8), 1835–1844.