

# THE INFLUENCE OF DEMOGRAPHIC FACTORS AND PROFESSIONAL BURNOUT ON NURSES' SELF-COMPASSION IN A HEALTHCARE FACILITY IN QASSIM, KINGDOM OF SAUDI ARABIA

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## Article Information

Received: 1 December 2024  
Revised: 20 January 2025  
Accepted: 21 March 2025

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## DOI

10.20884/1.jks.2025.20.1.13929

## ABSTRACT

Healthcare professionals face burnout, yet the role of self-compassion remains underexplored. This study examined the relationship between demographic factors, professional burnout, and nurses' self-compassion. Using a predictive-correlational and comparative design, 145 nurses were conveniently selected based on inclusion criteria, excluding those on leave or unwilling to participate. A survey questionnaire gathered data, analyzed through frequency, percentages, mean, standard deviation, t-test, ANOVA, Pearson r, and Stepwise Regression Analysis. Findings showed most respondents experienced low burnout and high self-compassion. Burnout levels significantly differed by marital status ( $p=0.005$ ), weekly working hours ( $p<0.001$ ), eating habits ( $p=0.005$ ), and burnout levels. Self-compassion varied significantly by age ( $p=0.027$ ), work experience ( $p=0.026$ ), financial comfort ( $p=0.021$ ), eating habits ( $p=0.049$ ), and burnout level ( $p=0.004$ ). A significant negative correlation was found between burnout and self-compassion ( $r=-.293$ ). Lower burnout was strongly predicted by being married, higher self-compassion, healthier eating habits, and fewer work hours, explaining 24.5% variance. Additionally, age and financial comfort predicted 15.6% variance in burnout. These findings suggest that nurses with lower burnout exhibit greater self-compassion and vice versa. Strategies promoting self-compassion may help mitigate burnout among nurses, enhancing their well-being and professional sustainability.

**Keywords:** *Eating Habits; nurses, professional burnout, physical activities; self-compassion, Saudi Arabia*



ISSN : 1907-6637

e-ISSN : 2579-9320

## BACKGROUND

Preserving, enhancing, and advancing the health of people and society is the aim of the nursing profession, a service as well as an art and a science. Nursing has long been viewed as a profession that encompasses research sciences and applications, provides benefits to all segments of society, and evolves within the framework of cultural, technological, and social advances. Nurses are now visible in all areas of health care, demonstrating their importance (Öztürk et al., 2020). Nurses were often trained to prioritize patients over their own interests and provide care for people of all ages who are in need and dealing with challenging circumstances over time, despite numerous social, cultural, and technical developments (Kabakçı & Altun, 2022).

Burnout is more prevalent in occupational groups with demanding conditions and strong contacts, with nurses and physicians being the most vulnerable among health workers (Izdebski et al., 2023). Due to this visibility, nurses are faced with significant emotional and physical demands while providing care to the patients (Jaishree & Parthiban, 2018) particularly burnout (Ungur et al., 2024). Burnout is a syndrome caused by continuous workplace stress that manifests as exhaustion, cynicism, and inefficacy (Demerouti et al., 2021). Its main characteristics—emotional exhaustion, depersonalization, and a decreased sense of personal accomplishment—are frequently aggravated by excessive job demands and insufficient resources (Demerouti, 2024; Ungur et al., 2024).

Persistent occupational stress, caused by factors such as work overload, long hours, a lack of institutional support, and constant exposure to patient suffering, has a negative impact not only on nurses' well-being but also on patient care and overall healthcare outcomes (Sharif et al., 2024; Vickie et al., 2024). Cognitive dysfunction decreased work performance, loss of empathy, and social retreat are early symptoms, with consequences that extend beyond individual distress to organizational efficiency (Tavella et al., 2021). Prior studies have identified common signs of burnout, including worker fatigue, low self-esteem, and declining performance (Maslach & Leiter, 2024). Healthcare professionals, particularly nurses, report higher levels of burnout compared to other occupations, leading to increased absenteeism and turnover rates (Xian et al., 2019; Berger-Estilita et al., 2024). Notably, workplace conditions and institutional factors have been found to have a more significant impact on burnout than individual personality traits or demographic factors (Zhdanova, 2024). To ensure high-quality service, it's crucial to also look into, and prioritize the well-being of nurses, who are the majority of healthcare professionals and have frequent patient interaction.

While burnout poses significant challenges, research suggests that self-compassion can serve as a protective factor against its adverse effects. Self-compassion is crucial for effectively coping with the obstacles of working with people who are often suffering. Caregivers often deny themselves self-care, which can improve their well-being and resilience, ultimately leading to more effective health care (Kabakçı et al., 2022). According to Neff as cited by Kabakci et al. (2022), self-compassion is being compassionate and loving towards oneself when suffering feelings of pain, failure, or inadequacy. It also acknowledges and accepts that everyone faces difficult circumstances and emotions. Self-compassion helps manage unpleasant situations, forgive oneself and others, and lead to better and more valuable lives (Neff, 2003). Moreover, self-compassion was defined as self-kindness, mindfulness, and recognition of shared human

experiences, fosters emotional resilience and reduces burnout and compassion fatigue among healthcare professionals (Hsiao, 2023). Studies show that higher levels of self-compassion enhance empathy, alleviate stress, and contribute to better patient care practices and caregiver-patient relationships (Abbasi et al., 2024; Borrelli et al., 2023). Furthermore, self-compassion mitigates the barriers to compassion created by burnout, allowing nurses to sustain their caregiving roles more effectively (Dev et al., 2018). Those with high self-compassion are less likely to engage in negative coping strategies such as self-criticism, avoidance, and emotional suppression (Maslach & Leiter, 2025).

Despite the growing recognition of self-compassion as a potential buffer against burnout, research remains limited on how demographic factors and professional burnout influence nurses' self-compassion, particularly in Saudi Arabia. Additionally, while existing studies highlight the role of workplace conditions in burnout, there is insufficient exploration of how organizational expectations—such as maintaining a professional appearance and managing workload stress—impact self-compassion among nurses (Vaillancourt & Wasylkiw, 2019). This study aims to address this gap by examining the influence of demographic factors and professional burnout on nurses' self-compassion. Awareness of this matter could be a helpful guide for the management to better understand and address the problems encountered by nurses working in the hospital. The results further support the integration of self-compassion training, work-life balance programs, and nutrition interventions to foster mental health resilience into nursing practice.

## METHOD

### Study design

A predictive-correlational and comparative design was employed in this study to investigate the relationship and influence of professional burnout and other factors to the self-compassion among nurses in a healthcare facility in Qassim, KSA which establishes associations among variables (Gray & Groove, 2021) and forecast the impact of professional burnout and other factors to the nurses' self-compassion and compare two or more cases (Iranifard & Roudsari, 2022).

### Participants

The respondents were conveniently selected based on the following criteria: (1) providing direct patient care, (2) currently employed at the healthcare facility, (3) available during data collection (not on leave), and (4) willing to participate. A priori power analysis determined the minimum sample size of 107 (Power = 0.95; effect size = 0.15; alpha = 0.05), but 145 nurses ultimately participated. A priori power analysis ensures adequate statistical power, preventing missed significant effects in research (McKay et al., 2022).

### Instruments

This study utilized a survey questionnaire which underwent pilot testing and comprised of 3 parts. Part 1-Socio-demographic profile. Part 2-Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005), a 19-item 5-point Likert scale questionnaire answerable by Never-1 to Always-5 with  $\alpha=0.756$  was used to measure the burnout level. Part 3-Self-Compassion Scale (SCS) (Neff, 2003), a 26-item 5-point Likert scale with  $\alpha=0.898$  was used to measure self-compassion.

### Data collection

The research team collected the data in a healthcare facility in Buraydah, Qassim, KSA assisted by the department heads

of the facility. Online surveys were drafted and sent to the respective units under study.

#### Data analysis

Using the IBM SPSSv.29, Frequency, percentages, mean, SD, t-test, ANOVA, Pearson product moment, and stepwise regression analysis was used to treat the data gathered.

#### Ethical considerations

The research team secured ethical permission from Qassim University's College of Nursing's Research Center Committee (RCC) with the ethical reference number (23-60-13).

### RESULT

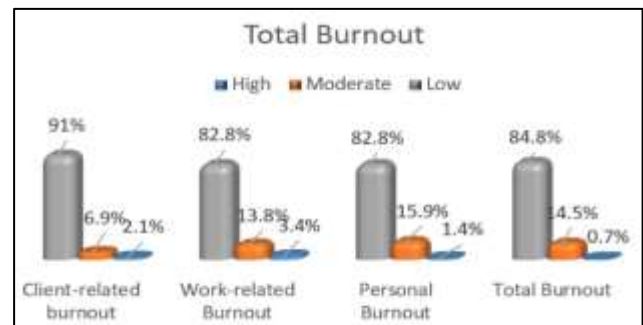
Table 1 presents the respondents' socio-demographic characteristics. The average age was 32.7 years (SD = 5.22), with most (60%) aged 24–33, predominantly female (88.3%) and married (58.6%). The majority (86.3%) had less than 10 years of work experience, averaging 37.86 hours per week (SD = 10.77). Over half (57.9%) reported neutral financial comfort, with 74.5% having 20–29 vacation days annually and using an average of 2.39 (SD = 2.91) sick leaves per year. Regarding lifestyle, 53.1% exercised once per week, and 55.2% consumed 1–2 healthy meals daily.

**Table 1. Nurses' Socio-demographic Characteristics**

Socio-demographic Characteristics	f n=145	% 100%	M & SD
<b>Age (years)</b>			
24 – 33 years old	87	60.0	32.78±5.22
34 – 43 years old	54	37.2	
44 years old and above	4	2.8	
<b>Sex</b>			
Male	17	11.7	
Female	128	88.3	
<b>Marital Status</b>			
Single	60	41.4	
Married	85	58.6	
<b>Years of Working Experience</b>			
10 years and below	99	68.3	8.43± 4.07
More than 10 years	46	31.7	
<b>Working hours per week</b>			
Less than 24	17	11.7	37.86± 10.77
24 to 48 hours	126	86.9	
Greater than 48 hours	2	1.4	
<b>Financial Comfort</b>			
Uncomfortable	11	7.6	
Neutral	84	57.9	
Comfortable	50	34.5	
<b>Vacation Days taken per year</b>			
0 – 1 day	8	5.5	26.63± 8.84
2 – 9 days	4	2.8	
10 – 19 days	14	9.7	
20 – 29 days	108	74.5	
30 – 39 days	10	6.9	
40 days and above	1	0.7	

Socio-demographic Characteristics	f n=145	% 100%	M & SD
<b>Sick leaves taken in past year</b>			
5 days and below	120	82.8	2.39± 2.91
More than 5 days	25	17.2	
<b>Frequency of exercise</b>			
Zero to 1 time per month	32	22.1	53.1
Almost once per week	77	53.1	
Almost daily	36	24.8	
<b>Eating habits</b>			
All unhealthy meals, almost daily	2	1.4	55.2
1–2 non-healthy meals, per day	23	15.9	
1–2 healthy meals, per day	80	55.2	
All healthy meals, almost daily	40	27.6	

Figure 1 showed the respondents' level of burnout. Many of the respondents were reported to have a low level of personal (82.8%), work-related (82.8%), and client-related (91%) burnout. Meanwhile, moderate (pb=15.9%, wrb=13.8%, crb=6.9%) to high pb=1.4%, wrb=3.8%, crb=2.1%) levels of burnout were reported among other respondents respectively.



**Figure 1. Nurses' Professional Burnout**

Table 2 showed the respondents' level of self-compassion and its domains. Respondent's self-compassion was primarily shown through their self-kindness (M=17.08±4.45) while isolation (as part of the self-compassion) was reported to be lesser (M=9.58±3.09) utilized as an expression of self-compassion among the respondents. The total mean score of self-compassion is 89.56±12.64.

**Table 2. Respondents' Level of Self-Compassion**

Domains	Mean± SD	Self-Compassion
Self-Kindness	17.08±4.45	89.56±12.64
Self-Judgment	12.39±3.33	
Common Humanity	13.21±3.57	
Isolation	9.58±3.09	
Mindfulness	13.76±3.58	
Over-identified	10.52±2.89	

Table 3. Respondents' socio-demographic characteristics, Test of Association on Burnout, and Test of Difference on Self-Compassion (n=145)

Socio-demographic Characteristics	f	%	M & SD	Burnout						Test of Association		Self-Compassion	Test of Difference	
	n=145	100%		Low		Moderate		High		$\chi^2$	p-value		Test	p-value
				n=123	%	n=21	%	n=1	%					
Age (years)														
24 – 33 years old	87	60.0	32.78±5.22	72	58.5	14	66.7	1	100.0	1.671	0.796	88.37±12.13	F=3.688	0.027*
34 – 43 years old	54	37.2		47	38.2	7	33.3	0	0.0			90.31±12.50		
44 years old and above	4	2.8		4	3.3	0	0.0	0	0.0			105.25±17.67		
Sex														
Male	17	11.7	8.43± 4.07	14	11.4	3	14.3	0	0.0	0.280	0.869	89.41±10.67	t=0.053	0.958
Female	128	88.3		109	88.6	18	85.7	1	100.0			89.58±12.91		
Marital Status														
Single	60	41.4	37.86±10.77	57	46.3	2	9.5	0	0.0	10.766	0.005**	88.38±13.95	t=0.946	0.346
Married	85	58.6		66	53.7	19	90.5	1	100.0			90.40±11.64		
Years of Working Experience														
10 years and below	99	68.3	8.43± 4.07	80	65.0	18	85.7	1	100.0	4.007	0.135	87.97±12.83	t=-2.246	0.026*
More than 10 years	46	31.7		43	35.0	3	14.3	0	0.0			92.97±11.63		
Working hours per week														
Less than 24	17	11.7	37.86±10.77	17	13.8	0	0.0	0	0.0	78.037	<0.001**	89.47±11.02	F=0.260	0.771
24 to 48 hours	126	86.9		106	86.2	20	95.2	0	0.0			89.47±12.92		
Greater than 48 hours	2	1.4		0	0.0	1	4.8	1	100.0			96.00±9.89		
Financial Comfort														
Uncomfortable	11	7.6	26.63± 8.84	11	8.9	0	0.0	0	0.0	7.576	0.108	80.63±5.18	F=3.971	0.021*
Neutral	84	57.9		67	54.5	17	81.0	0	0.0			89.20±13.48		
Comfortable	50	34.5		45	36.6	4	19.0	1	100.0			92.14±11.46		
Vacation days taken per year														
0 – 1 day	8	5.5	26.63± 8.84	8	6.5	0	0.0	0	0.0	2.493	0.991	87.12±9.78	F=0.550	0.738
2 – 9 days	4	2.8		3	2.4	1	4.8	0	0.0			95.75±8.18		
10 – 19 days	14	9.7		12	9.8	2	9.5	0	0.0			85.71±7.37		
20 – 29 days	108	74.5		91	74.0	16	76.2	1	100.0			90.08±13.70		
30 – 39 days	10	6.9		8	6.5	2	9.5	0	0.0			88.70±10.04		
40 days and above	1	0.7		1	0.8	0	0.0	0	0.0			91.00±0.0		
Sick leaves taken in past year														
5 days and below	120	82.8	2.39± 2.91	101	82.1	19	90.5	0	0.0	5.712	0.057	88.85±12.20	t=-1.499	0.136
More than 5 days	25	17.2		22	17.9	2	9.5	1	100.0			93.00±14.32		
Frequency of exercise														
Zero to 1 time per month	32	22.1	18.508	26	21.1	5	23.8	1	100.0	5.080	0.279	88.84±10.54	F=0.641	0.528
Almost once per week	77	53.1		64	52.0	13	61.9	0	0.0			88.89±12.02		
Almost daily	36	24.8		33	26.8	3	14.3	0	0.0			91.63±15.46		
Eating habits														
All unhealthy meals, almost daily	2	1.4	18.508	0	0.0	2	9.5	0	0.0	18.508	0.005**	65.00±0.0	F=2.663	0.049*
1–2 non-healthy meals, per day	23	15.9		18	14.6	5	23.8	0	0.0			90.47±14.93		
1–2 healthy meals, per day	80	55.2		66	53.7	13	61.9	1	100.0			89.71±11.84		
All healthy meals, almost daily	40	27.6		39	31.7	1	4.8	0	0.0			89.97±12.17		

Legend:  $\chi^2$ =Chi square test; F: one-way ANOVA, t: student t-test; non-significant(p>0.05); statistically highly significant (p<0.01) \*\*

Table 3 presents the Pearson chi-square test results on the association between respondents' sociodemographic characteristics and burnout levels. Marital status ( $p=0.005$ ), working hours per week ( $p<0.001$ ), and eating habits ( $p=0.005$ ) showed statistically significant associations with burnout. However, age, sex, years of experience, financial comfort, vacation days, sick leaves ( $p>0.05$ ), and exercise frequency ( $p=0.279$ ) showed no significant associations. Meanwhile, tests of difference analysis between socio-demographic characteristics and self-compassion showed significant differences influenced by age, work experience, financial comfort, and eating habits. Older respondents ( $\geq 44$  years) had higher self-compassion scores ( $M=105.25$ ,  $SD=17.67$ ), suggesting growth with age. Those with over 10 years of experience ( $M=92.97$ ,  $SD=11.63$ ) also reported higher self-compassion, implying enhanced coping skills. Financially secure respondents scored higher ( $M=92.14$ ,  $SD=11.46$ ), linking economic stability to reduced stress. Healthier eating habits correlated with greater self-compassion, emphasizing nutrition's role in well-being. No significant differences were found for sex, marital status, work hours, vacation days, sick leave, or exercise frequency.

Table 4 shows a significant difference in self-compassion scores by burnout levels ( $F=5.671$ ,  $p=0.004$ ). Self-compassion scores were highest for low ( $M=90.97$ ,  $SD=12.70$ ) and high burnout ( $M=91.00$ ,  $SD=0.0$ ), but lower for moderate burnout ( $M=81.23$ ,  $SD=8.98$ ). This suggests moderate burnout may hinder self-compassion, while high burnout individuals may have developed coping mechanisms. The uniformity in high burnout scores ( $SD=0.0$ ) suggests a consistent self-compassion approach. Additionally, significant correlations were found between burnout and self-compassion components like self-judgment ( $r=.441^{**}$ ), isolation ( $r=.507$ ), and over-identification ( $r=.378$ ). This highlights the role of self-compassion in reducing burnout, while self-judgment and over-identification may worsen it.

**Table 4. Test of difference between the respondents' Level Self-Compassion when grouped according to their level of burnout**

Self-Compassion	Burnout			Test F	p value
	Low	Moderate	High		
89.56 $\pm$ 12.64	90.97 $\pm$ 12.70	81.23 $\pm$ 8.98	91.00 $\pm$ 0.0	5.671	0.004**

Meanwhile, table 5 shows the correlation matrix between the variables. The correlation matrix emphasizes the intricate relationship between burnout, self-compassion, and its constituent parts. In particular, the burnout and its domains have significant relationship between some components of self-compassion [self-judgment ( $r=.441^{**}$ ), isolation ( $r=.507$ ), and over-identified ( $r=.378$ )]. Other domains, however, don't have significant relationships with each other. The results imply that self-compassion guards against burnout, especially when combined with aspects of self-kindness and mindfulness. On the other hand, it seems that over-identification and self-judgment aggravate burnout symptoms. These findings highlight the potential advantages of encouraging self-compassionate attitudes in people, especially in high-stress situations, to lessen burnout and enhance general well-being.

Furthermore, regression analysis presented in Table 6 revealed that being married, higher self-compassion, healthier eating habits, and fewer weekly working hours predicted lower burnout, explaining 25.4% of burnout variance ( $R^2=.254$ ,  $F(4,N)=11.934$ ,  $p<.001$ ). Being married reduced burnout by 8.293 ( $\beta=-.266$ ), while self-compassion and healthier diets lowered burnout by 3.140 ( $\beta=-.258$ ) and 5.289 ( $\beta=-.239$ ), respectively. Conversely, age and financial comfort increased burnout, with age raising burnout by 0.426 ( $\beta=.176$ ) and financial comfort contributing to a 3.689 increase ( $\beta=.173$ ), explaining 15.6% of variance ( $R^2=.156$ ,  $F(3,N)=8.699$ ,  $p<.001$ ).

**Table 5. Correlation Matrix between study variables**

	PB	WRB	CRB	SC	SK	SJ	CH	I	M	OI
Burnout	.871**	.927**	.871**	-.293**	-.037	.441**	.124	.507**	.044	.378**
Personal Burnout (PB)		.773**	.623**	-.354**	-.165	.406**	.016	.457**	-.084	.253**
Work-related Burnout (WRB)			.678**	-.214**	.047	.426**	.146	.479**	.109	.322**
Client-related burnout (CRB)				-.246**	-.028	.350**	.140	.420**	.052	.417**

**Legend:** r: correlation coefficient, non-significant ( $p>0.05$ ), \*: statistically significant ( $p<0.05$ ), \*\*: statistically highly significant ( $p<0.01$ ); SC- Self-compassion; Parameters – SK-Self-Kindness, SJ-Self-Judgement, CH-Common Humanity, I-Isolation, M-Mindfulness, OI-Over-identified.

**Table 6. Step wise multiple linear regression for predicting factors which affect burnout score**

Model	Unstandardized Coefficients		Standardized Coefficients B	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
(Constant) <b>Model 1</b>	100.441	10.634		9.445	.000	79.416	121.466
Marital status (married)	-8.293	2.353	-.266	-3.525	0.001**	-12.945-	-3.641-
Self-compassion	-.314	.089	-.258	-3.516	0.001**	-.490-	-.137-
Eating habits	-5.289	1.699	-.239	-3.114	0.002**	-8.647-	-1.931-
Working hours per week	-.237	.106	-.166	-2.229	0.027*	-.447-	-.027-
(Constant) <b>Model 2</b>	75.036	7.241		10.362	.000	60.720	89.351
Total burnout	-.230-	.064	-.280-	-3.617	0.001**	-.356-	-.104-
Age	.426	.190	.176	2.239	0.027*	.050	.801
Financial comfort	3.689	1.675	.173	2.203	0.029*	.378	7.001

**Legend:** statistically significant ( $p<0.05$ )\*; statistically highly significant ( $p<0.01$ )\*\*; **Model 1:**  $R^2=0.254$ , ANOVA:  $F= 11.934$ ,  $P<0.001$ ; Variables entered and excluded: age (years), sex, years of experience, financial comfort, vacations days taken per year, sick leaves taken in past year, and frequency of exercise; **Model 2:**  $R^2=0.156$ , ANOVA:  $F= 8.699$ ,  $P<0.001$ ; Variables

entered and excluded: sex, marital status, years of experience, working hours per week, vacations days taken per year, sick leaves taken in past year, eating habits and frequency of exercise

## DISCUSSION

Burnout, a psychological syndrome caused by prolonged workplace stress, is prevalent among healthcare workers, particularly nurses, and can negatively impact their mental and physical well-being, as well as patient care (Hashem & Zeinoun, 2020; Martínez-López et al., 2020). It can affect healthcare organizations, service recipients, and professionals alike (Demerouti et al., 2021). Understanding the unique factors that contribute to burnout may help in developing interventions and prevention strategies (Hashem & Zeinoun, 2020). Factors such as self-compassion, which involves recognizing personal struggles and failures as part of human experience, may serve as a protective barrier against burnout (Habeger et al., 2022). This discussion explores socio-demographic characteristics, lifestyle habits, burnout scores, self-compassion levels, and the relationships among these variables.

Most respondents in this study were from Generation Y, with a mean age of approximately 33 years, a result similar to Liu et al. (2024), who reported a mean age of 32.2 years. Other studies have reported varying age ranges (20-29 years: Vaillancourt & Wasylikiw, 2019; 50-59 years: Sawyer et al., 2021), showing differences in the age distribution. Female nurses predominated in this study, a finding that aligns with Vaillancourt and Wasylikiw (2019). In other studies, nearly two-thirds (Sawyer et al., 2021) and over three-quarters (Nazari et al., 2024) of participants were also female.

The majority of respondents in this study were married and had less than ten years of work experience, similar to the previous studies (Abdollahi, Taheri & Allen, 2020; Sawyer et al., 2021). However, some studies (Hashem et al., 2020; Vaillancourt et al., 2019) found that more than half of respondents were single, though years of work experience aligned with this study's findings.

Regarding working hours, respondents in this study worked an average of 38 hours per week, similar to Vaillancourt et al., (2019), while Hashem et al., (2020) reported an average of 54 hours. The study found that respondents had neutral financial comfort and took an average of 26 vacation days and two sick leave days, consistent with previous study (Hashem et al., 2020).

Exercise frequency was found to be once per week in this study, which is in line with Hashem et al., (2020). However, respondents reported consuming 1-2 healthy meals per day, in contrast to Hashem's study, where participants consumed 1-2 unhealthy meals daily.

Burnout levels in this study were predominantly low, with over 75% of respondents reporting low burnout, similar to findings by Abdollahi et al., (2021) and Sawyer et al. (2021).

Self-compassion scores indicated that respondents exhibited high levels of self-kindness but lower levels of isolation. This finding contradicts Vaillancourt et al., (2019), who found lower self-compassion scores and Othman, Hassan, and Mohamed (2023), who reported a similar pattern in self-compassion domains.

Work-related factors, such as job strain and unreasonable workloads, have been found to be stronger predictors of burnout than individual characteristics like age, sex, or financial comfort (Bianchi et al., 2021; Lam et al., 2022). This

aligns with the current study, which found significant associations between burnout and marital status and weekly working hours, but no significant relationship with factors like age, sex, and financial comfort.

Some studies (Nazari et al., 2024; Liu et al., 2024) reported conflicting results, finding significant relationships between age, sex, and burnout. Other research (Jang, Jeong, & Park, 2022) found burnout to be more prevalent among younger, single nurses with inadequate social support. Factors such as nurse-to-patient ratios, long shifts, and stress from specialized care contribute to burnout, particularly emotional exhaustion and depersonalization (Varghese & James, 2024; Majid et al., 2024). Demographic factors like gender and advanced education also increase burnout risk, with female nurses being especially vulnerable (Wang et al., 2024).

This study also identified a significant correlation between eating habits and burnout levels, consistent with research linking poor nutrition to higher stress and burnout (Alexandrova-Karamanova et al., 2016; Penttinen et al., 2021). Healthier diets, including increased fruit and vegetable intake, were associated with lower burnout levels among healthcare workers (Utter et al., 2023). Conversely, diets high in processed foods were linked to greater emotional exhaustion and depersonalization (Chui et al., 2019).

Exercise frequency did not show a significant correlation with burnout in this study, aligning with other research that suggests moderate to high levels of regular exercise can reduce burnout, while low or irregular exercise does not (Naczenski et al., 2017). Guerrero et al. (2024) found that physically active nurses reported significantly lower burnout levels.

This study's findings also complement existing literature on the relationship between burnout and self-compassion among healthcare workers (Liu et al., 2024; Jang, Jeong, & Park, 2022). It underscores that moderate burnout may represent a transitional phase where self-compassion's protective benefits are not fully realized.

The study found a significant negative correlation between self-compassion and burnout, supporting previous research (Abdollahi et al., 2021; Hashem & Zeinoun, 2020). Studies by Jang et al., (2022) and Lingyu & Rosa (2021) highlighted that self-compassion helps reduce burnout, emphasizing the need for interventions that promote self-compassion in high-stress professions like nursing.

Regression analysis showed that married status, greater self-compassion, healthier eating habits, and fewer work hours per week predicted lower burnout levels. These findings align with Cañadas-De la Fuente et al. (2018), who identified similar predictors, though some studies, such as Alotni and Elgazzar (2020), reported contrasting findings regarding the relationship between marital status and burnout.

Finally, self-compassion was found to be a strong predictor of reduced burnout, consistent with previous studies (Lyon & Galbraith, 2023; Liu et al., 2024). Regular, healthy eating and self-compassion interventions are essential strategies for alleviating burnout and improving well-being among healthcare workers (Mills, Wand & Fraser, 2015; Penttinen et al., 2021).



This study has several limitations. First, the use of convenience sampling may have introduced selection bias, limiting the generalizability of the findings to the broader population of nurses. Additionally, data collection was conducted in a single healthcare facility in Buraydah, Qassim, KSA, which may restrict the applicability of the results to other settings or regions. Furthermore, the reliance on self-reported measures could be influenced by social desirability bias or participants' subjective interpretations. Future studies are encouraged to include a more diverse sample and explore additional healthcare settings to enhance the generalizability and validity of the findings.

## CONCLUSION AND RECOMMENDATION

This research highlights the relationships between nurses' sociodemographic characteristics, burnout levels, and self-compassion, revealing that marital status, weekly work hours, and healthy eating habits significantly influence burnout, while self-compassion, particularly self-kindness, is inversely related to burnout. Nurses with moderate burnout reported the lowest self-compassion, emphasizing the need for targeted interventions. To mitigate burnout and enhance well-being, healthcare facilities should promote self-compassion through training programs, encourage healthier eating habits, and optimize workload distribution, particularly by addressing weekly work hours. Future research should explore these factors in diverse settings and populations using longitudinal designs to develop tailored interventions for burnout prevention and resilience building among healthcare professionals.

## ACKNOWLEDGEMENT

The authors would like to acknowledge the scientific research committee of Qassim University for the approval of the study. Same appreciation to the respondents of this study, your participation is highly appreciated

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