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Psychosocial and Organizational Factors Associated with Job Frustration Among Mental Health Nurses in Oman

Asiya M. Al Zadjali
Universiti Malaysia Sarawak
Yoke Yong Chen
yychen@unimas.my
Universiti Malaysia Sarawak
Keng Sheng Chew
Universiti Malaysia Sarawak
Rekaya A. V. Balang
Universiti Malaysia Sarawak
Hamida H. Al Harthi
Ministry of Health
Md Mizanur Rahman
Universiti Malaysia Sarawak

Research Article

Keywords: Job Frustration, Burnout, Mental Health Nursing, Self-Efficacy, Leadership, Coping Strategies, Work Engagement, Policy-Oriented Insights

Posted Date: May 8th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-9341254/v1

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Additional Declarations: No competing interests reported.

Abstract

Background

Mental health nurses work in highly demanding settings, placing them at elevated risk for frustration and burnout. This study aimed to explore the psychosocial and organizational factors associated with job frustration among mental health nurses in Oman.

Methods

A cross-sectional design was employed, with 201 participants (general nurses and nursing leaders) completing five validated instruments: the Copenhagen Burnout Inventory (CBI), General and Social Self-Efficacy Scales, Work Engagement Scale, Leadership Perception Scale, and Coping Scale. Group comparisons were conducted using t-tests, chi-square test, mean, SD, p-value analyses of both groups of nurses to study variables and multi-linear regression analyses examined relationships between variables.

Results

Participants demonstrated moderate levels of self-efficacy, leadership support, and coping, but burnout scores were notably high in work-related and client-related domains. Burnout was positively correlated with general self-efficacy ($r = .326$, $p < .01$), leadership perception ($r = .218$, $p < .01$), and coping strategies ($r = .232$, $p < .01$), while work engagement was not significantly associated. Nursing leaders exhibited significantly higher personal and work-related burnout than general nurses ($p = .002$ and $p = .018$, respectively), despite higher engagement in decision-making and policy development.

Conclusions

These findings underscore the need for targeted, role-specific interventions to mitigate occupational frustration and burnout and enhance well-being, supporting sustainable organizational outcomes and evidence-informed policy in mental health nursing.

1. BACKGROUND

Nursing staffs are the majority workforce who act in the first line with patients as well as with other multidisciplinary teams. Therefore, they are under higher risk of job frustration than other team members. Job frustration (JF) is defined as a mental state that emerges when a worker encounters obstacle that impede the achievement of their professional objectives (Andalib & Halim, 2020). Job frustration in a form of burnout was first presented by Freudenberger in 1974 when an employee was observed to have lack of commitment at work due to lack of motivation (Dall'Ora et al., 2020).

A thorough analysis of the psychosocial and organizational factors that contribute to job dissatisfaction in the mental health nurse workforce is necessary to comprehend this issue. Even though burnout is receiving more attention worldwide, there is still a dearth of empirical data from Middle Eastern contexts, especially Oman, about how variables like self-efficacy, leadership perception, coping mechanisms, and work engagement interact to affect occupational distress. In order to provide a thorough picture of workforce mental health, a cross-sectional method is crucial for measuring the frequency and correlations of these factors in actual clinical settings. Finding these correlations is essential for developing evidence-based, context-specific interventions and organizational policies that improve staff sustainability and lessen burnout in mental health services.

In terms of work-related frustration among healthcare workers (HCW), WHO (2016) had set one of its principles for the workforce in 2030 to hold them the right to practice in a "safe and decent working environments and freedom from all kinds of discrimination, coercion and violence" (WHO, 2016, p.8). Nurses' frustration and stress at work is a common observable fact that affects negatively their emotional well-being, power, motivation and occupation efficiency (Henrich et al., 2017; Mudallal et al., 2017). A number of factors, such as workload and staffing levels, emotional demands in patient care, organizational support systems, the availability of workplace resources, and broader social and cultural influences, have been found in prior research to influence job dissatisfaction and occupational stress among mental health nurses (Hamaideh, 2011; Al-Khanjari & Al-Abri, 2020; Al-Balushi, 2021). These characteristics, in particular burnout, coping mechanisms, perceived leadership support, self-efficacy, and work engagement, are conceptually consistent with the factors investigated in this study. As a result, this study investigates empirically how these interconnected organizational and psychosocial elements affect mental health nurses' job dissatisfaction in the Omani setting.

1.1 Healthcare Services in Oman

There is gradual expansion of healthcare services in Oman including mental health with fall down of staffing levels (Al-Khanjari & Al-Abri, 2020). This estimated to result in longer shifts, more patient care responsibilities and emotional exhaustion. Additionally, according to research by Hamaideh (2011), mental health nurses (MHNs) may experience severe job dissatisfaction as a result of the emotional demands imposed on them. Cultural considerations might make this problem more severe in Oman, where social stigma may prevent many individuals from seeking mental health treatment or from openly expressing their feelings (Qutishat, 2025). Furthermore, job satisfaction in healthcare organizations were significantly influenced by the organizational structure and support networks in place. Feelings of annoyance and discontent could be exacerbated by inadequate training, a lack of supervisory support, and poor communication (Al Sabei et al., 2020). From observation, inadequate professional development programs and a dearth of comprehensive mental health policies had been identified as contributing causes to the stress that MHNs in Oman endure. Another influence may be the actual setting in which nurses operate including inadequate resources, overcrowded mental health facilities, and patient privacy violations (Al Sabei et al., 2020). Research had shown that inadequate funding and infrastructure in certain Omani healthcare settings added to nurses' discontent (Al Sabei et al., 2020).

In Oman, nurses' experiences are greatly influenced by cultural perspectives on mental health. In certain Omani communities, the stigma associated with mental illness might make it more difficult for nurses to deliver care since patients may feel ashamed or reluctant to ask for assistance. Due to the historical stigma associated with mental health, MHNs in Oman might also experience emotions of alienation and frustration at work (Al-Khanjari & Al-Abri, 2020).

1.2 Problem Statements

Because of the special nature of MHNs' practice, they are the focus of this study specially when studies conducted in Oman on this groups of HCWs are scarce. In contrast to nurses in other disciplines, MHNs must navigate complicated emotional and societal challenges while attending to patients' psychological needs (Al-Adawi et al., 2002). To illustrate, the emotional strain of caring for patients with mental diseases can be unbearable, and MHNs frequently encounter people in crisis. This is in contrast to other nursing disciplines where the main emphasis may be on physical care. For instance, MHNs deal with psychological trauma, such as self-harm and aggressive attacks, which are less common in other nursing areas, but nurses in general medical wards may encounter stress due to physical sickness and medical procedures (Sahraian et al., 2013). Another element that sets the experiences of MHNs apart from those of other nurses was the stigma associated with mental illness (Al Sabei et al., 2020). Both patients and nurses might feel alienated as a result of this stigma (Al Sabei et al., 2020). The cultural stigma associated with mental illness in Oman might make MHNs feel alone in the healthcare system, which could lower their job satisfaction (Al Sabei et al., 2020). Additionally, specialized abilities such as therapeutic communication, crisis response, and a thorough comprehension of psychiatric diseases are necessary for mental health nursing (Al Sabei et al., 2020). It can be distressing to feel pressured to keep up these specific abilities, especially if nurses believe they lack the tools or support they need.

The specific mix of difficulties faced by MHNs, especially in Oman, adds to their job dissatisfaction. High workloads, emotional pressures from patient encounters, organizational shortcomings, and the stigma associated with mental health in society were some of these difficulties (Al-Lawati & Al-Maskari, 2017). These nurses' coping mechanisms, which range from professional support networks to personal resilience, were essential for reducing stress and averting job frustration. Because MHNs' work is specialized and emotionally strenuous, their experiences differ greatly from those of other nurses, which is why they are the focus of this study. Improving these nurses' well-being, job satisfaction, and retention rates requires data-driven insights for supportive relevant policies.

In order to effectively manage job frustration among nurses, it is necessary to first identify the organizational and psychosocial elements that are linked to job frustration among mental health nurses in Oman, taking into account both general nurses and nursing leaders. This study looked at important factors as primary predictors of occupational frustration, including role-related beliefs (including leadership and role clarity), emotional reactions to work, self-efficacy, job engagement, and coping mechanisms. These variables, which offer a thorough framework for comprehending differences in nurses' experiences of occupational stress and burnout, were chosen based on their empirical significance in the nursing literature and their applicability to mental health clinical settings. The

evidences indicated that there is reasonable level of anxiety in Oman which is identified as different than other Gulf Corporate Countries (GCC) (Sadriwala & Malik, 2021). Although, there is quick educational and economic development in Oman, but it still reserves its cultural and societal values (Sadriwala & Malik, 2021).

In Oman's mental health hospital, 18% out of 600 total nursing workforces were identified to have mental and physical health problems in year 2018. In addition to this, the process of turnover was very fast especially among senior nursing staff who completed 15 years and above in mental health setting. It was hard to find a nurse more than 15 years' experience in the hospital working in the clinical field. For instance, currently in the mental health hospital there is 11% of the total nurses are senior experienced nurses including non-Omani nationalities. Seniority is defined as those completed 15 years in the field of practice and trained as team leaders. As a result of this fact, the proficiency level was affected in terms of having less expertise staff holding middle- and first-line management positions. There is little empirical data from the Omani mental health setting to support the association between occupational stress and job frustration and a higher likelihood of turnover intention in nursing populations. Specifically, there is still a lack of research on the degree to which organizational and psychosocial factors contribute to occupational discontent among mental health nurses. By investigating the relationships between burnout, self-efficacy, leadership perspective, coping mechanisms, and work engagement as potential predictors of job frustration in this cohort, the current study fills this gap. Therefore, this study was intended to find out the severity of job frustration among general nurses and nursing leaders in mental health setting in Oman. It as well examined the factors related to nursing JF. JF of general nurses and nursing leaders in mental health setting was further explored and highlighted. Data were collected in consideration of the factors associated with the job distress.

Therefore, the main objective of this study is to examine the prevalence, allied factors, implication related to policies of job frustration among mental health nurses in Oman and to develop data-driven perceptions for workplace wellbeing and enhanced mental health of nursing workforce.

2. METHODS

A descriptive survey approach was done on a wider target population to find out the severity of job frustration among nurses in mental health setting using Copenhagen Burnout Inventory (CBI). In addition to this, other set of scales and questionnaires used to determine the internal and external factors affecting job frustration which were Self-efficacy Scale (SES), Utrecht Work Engagement scale (UWES), Coping Scale (CS) and Conger-Kanungo Questionnaire (CKQ). In addition to this, an additional questionnaire was prepared by the principle investigator which was 6-items demographic data (age, gender, marital status, years of experience, position and qualification). The questionnaire was distributed to the target population available who were all nurses in mental health setting. This study aimed to explore the psychosocial and organizational factors associated with job frustration among mental health nurses in Oman

2.1 Copenhagen Burnout Inventory

Copenhagen Burnout Inventory (CBI) was considered to measure the burnout level among nurses in mental health setting. It was developed by Kristensen et al. (2005) consisting of 19-items covering three domains which were personal burnout (PB) (6-items), work-related burnout (WB) (7-items) and client-related burnout (CB) (6-items). These domains were focusing on physical and emotional exhaustion of the employee at work setting and while interacting with patients. It was rated on 5-point Likert-scale from 0 'never' to 4 'always'. The scores were rated for all domains as < 33 (low), 33–50 (moderate) and > 50 (high). The scale was reliable in the current study with the internal consistency of 0.83.

2.2 Self-efficacy Scale

Self-Efficacy Scale (SES) was considered to assess the level of belief on oneself and ability to respond to various situations which was developed by Ralf Schwarzer and team (Schwarzer et al, 1994). It was 30-item scale translated from the original German version. Each of these items had four options to respond as rating from 1 'Not at All' to 4 'Exactly true'. Later, the overall scores of all 30-times summed to present total score. The higher the score, the higher self-efficacy was represented. The reliability of the scale was well established with Cronbach alpha score 0.86 in the current study.

2.3 Utrecht Work Engagement Scale

Utrecht Work Engagement Scale (UWES) was designed by Schaufeli et al. (2009). It aimed to assess employee engagement. This scale was 17-items categorized under 3 domains (vigour, dedication and absorption) rated from 0 to 6. If the participant had never had the specified feeling it will be rated 0 and if they had the specified feeling from the 17-items it was rated as how often from 1–6 representing the frequency of describing the feeling. This scale focused on three main factors which were employee energy, involvement and efficacy. This questionnaire was opposing the CBI in sense that it focused on the positive aspects of the same items. In the current study, the Cronbach alpha score of 0.96 as overall with sub scores of 0.94, 0.84 and 0.94 for Dedication, Absorption and Vigour dimensions of the scale is reliable.

2.4 Conger-Kanungo-Questionnaire

Conger-Kanungo Questionnaire (CKQ) was developed by Jay A. Conger and Rabindra N. Kanungo (Conger et al., 1997). It was 25-items scale focusing on strategic vision, sensitivity to environment, sensitivity to member needs, personal risk, unconventional behaviour and self-centered restricted attitude. The rating of each item had 6 possible ratings which started from 6 indicating 'very characteristic for you' to 1 indicating 'very uncharacteristic for you'. The total selected score was summed and the higher the score indicated the higher charismatic leadership style. The reliability of the scale was tested in the current study with a Cronbach alpha score of 0.76.

2.5 Coping Scale

This scale was developed by Hamby et al. (2015) consisted of 13-items questionnaire representing appraisal and behavioural measures of adaptation. The tool was reliable in the current study where coefficient alphas was 0.77. The items were measured on 4 score values where started from 4 indicating 'mostly true about me' to 1 indicating 'not true about me'. The higher the summed score of all items indicated higher adaptation abilities.

2.6 Participants and Sample Size

Mental Hospital's nursing administration department were accessed to get data of all nursing staff so as to conduct sampling for the data collection. The information was provided to collect data for the purpose of this study which were total of 350 nurses among which approximately 40 nurses were in management and supervision positions to determine the relationship among variables.

The total nursing workforce (*N* = 350 nurses) were all selected to be included in the quantitative data collection phase for responding to questionnaire consisted of demographic data and set of validated scales: CBI, GSES, UWES, CKQ and CS. The response rate was 60.9% where only 201 participants responded out of 330 nurses met the inclusion criteria.

2.7 Inclusion criteria: All the participants who are available at workplace for a period of three to four months and agree to participate.

2.8 Exclusion criteria: Participants who were on all kinds of regular leaves such as annual leave, study leave, unpaid leave and maternity leave were excluded from the study.

2.9 Data Collection and Procedure

All the participants were selected from the mental health setting in Oman and the study was carried out in their workplace. The researchers personally worked and supervised data collection process. All procedures performed in this study were conducted in accordance with the relevant guidelines and regulations, including the ethical standards of the institutional research committee and the principles outlined in the World Medical Association Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects. Ethical approvals were obtained from both Health Studies and Research Approval Committee (HSRAC), Ministry of Health-Sultanate of Oman and Medical Research Ethics Committee, Universiti Malaysia Sarawak (UNIMAS). Informed consent was obtained from all participants prior to participation in the study. The participation was voluntary, and completion of the online questionnaire administered through Microsoft Forms was considered as implied consent to participate. Participants were informed of their right to withdraw at any time from the study without any consequences.

2.10 Data Analysis

A statistical descriptive analysis of the five scales CBI, GSES, UWES, CKQ and CS including demographic data were done to determine the severity of burnout as well as determined the relationship among

dependent variable (i.e.,JF) in consideration of other co-variables (i.e., leadership, self-efficacy, work engagement and coping).

The analysis of the data conducted multiple linear regression analysis with burnout in form of job frustration (dependent variable) with leadership, self-efficacy, work engagement and coping (independent variables). As well as, correlation analysis was performed to find out bivariate association between the variables. Additionally, ANOVA was performed to find out the significant of the regression model.

3. RESULTS

3.1 Demographic Characteristics

The general demographic characteristics of the participants presented in Table 1. Out of 201 participants, 39% were male and 61% were female with mean age of 33.18. The response rate was 60.9%.

Table 1
General Demographic Characteristics of The Participants at Quantitative Data Collection Phase (N:201)

Characteristics	**Staff (*N* = 201)**
Gender	
Male	78 (39%)
Female	122 (61%)
Marital Status	
Married	157 (78.5%)
Divorced	3 (1.5%)
Single	39 (19.5%)
Widowed	1 (0.5%)
Number of Children's	
None	35 (17.5%)
One	48 (24%)
Two	46 (23%)
Three	25 (12.5%)
Four	11 (5.5%)
Five	8 (4%)
Six	5 (2.5%)
Missing data	22 (11%)
Age	
20–30 years.	183 (35.7%)
31–41 years.	243 (47.4%)
42–52 years.	87 (17%)
Years of experience	
Less than 5 years.	43 (21.5%)
6–15 years.	108 (54%)
Above 15 years.	47 (23.5%)

Characteristics	Staff (*N* = 201)
Gender	
Qualifications	
MSCs	8 (4%)
BSc	85 (42.5%)
Diploma	66 (33%)
Post Basic Diploma	39 (19.5%)
Position	
Nursing leaders	37 (18.5%)
General nurse	163 (81.5%)
Any Chronic illness?	
Yes	15 (7.5%)
No	185 (92.5%)
Allocation	
Admin	27 (13.5%)
Clinical	173 6.5%)

Additionally, the sociodemographic characteristics presented in Table 2 comparing the association between the categorical variables (age, gender, marital status, qualification, workplace allocation and years of experience) with the groups of nurses (general nurses and nursing leaders). The findings showed that all the variables are statistically significant with the groups of nurses except the marital status.

Chi-square result of independence showed significant associations between age group and position, $\chi^2(2, N = 153) = 6.72$, $p = .035$; gender and position, $\chi^2(1, N = 200) = 5.76$, $p = .016$; qualification and position, $\chi^2(3, N = 198) = 23.96$, $p < .001$; allocation and position, $\chi^2(1, N = 200) = 48.03$, $p < .001$; and years of experience and position, $\chi^2(2, N = 198) = 22.81$, $p < .001$. Marital status, however, was not significantly associated with position, $\chi^2 (3, N = 200) = 5.23$, $p = .155$.

Table 2

Chi-Square Test Presenting the Sociodemographic Characteristics by Position and Its Association to Categorical Variables

	Position		Sig.
	Nursing Leaders	**General Nurse**	
Age			0.004
20–30 years	0 (0%)	21 (13.7%)	
31–41years	26 (17%)	85 (55.6%)	
42–52 years	6 (3.9%)	15 (9.8%)	
Gender			0.016
Male	8 (4%)	70 (35%)	
Female	29 (14.5%)	93 (46.5%)	
Marital Status			0.191
Married	28 (14%)	129 (64.5%)	
Divorced	0 (0%)	3 (1.5%)	
Single	8 (4%)	31 (15.5%)	
Widowed	1 (0.5%)	0 (0%)	
Qualification			< 0.001
MSC	3 (1.5%)	5 (2.5%)	
BSC	25 (12.6%)	60 (30.3%)	
Diploma	0 (0%)	66 (33.3%)	
Post Basic Diploma	9 (4.5%)	30 (15.2%)	
Allocation			< 0.001
Admin	18 (9%)	9 (4.5%)	
Clinical	19 (9.5%)	154 (77%)	
Years of experience			< 0.001
Less than 5 years	1 (0.5%)	42 (21.2%)	
6–15 Years	17 (8.6%)	91 (46%)	
Above 15 years	19 (9.6%)	28 (14.1%)	

The scores suggesting overall moderate levels of self-efficacy, work engagement, leadership perception and use of coping strategies among participants (Table 3) The burnout scoring is showing more prominent symptoms in both work and client domains.

Table 3
Mean, SD and Sum of The Study Variables (N = 201)

Categories		***Mean***	***SD***	***Interpretation***
Self-Efficiency	General Self-Efficiency	3.22	0.59	Average confidence
	Social Self-Efficiency	4.53	0.59	High confidence
Work Engagement	Vigour	3.69	1.91	Healthy engagement
	Dedication	3.07	1.47	Moderate engagement
	Absorption	3.34	1.69	moderate to high engagement
Leadership		3.48	0.78	positive perception
Coping		2.82	0.67	slightly above average use
CBI	Personal Related	1.64	0.78	low burnout
	Work Related	1.98	0.71	low to moderate burnout
	Client Related	4.67	0.89	high burnout

3.2 Factors Predicted Burnout

A multiple linear regression analysis was conducted to examine the extent to which self-efficacy, work engagement, leadership and coping predicted burnout. ANOVA results indicated that the overall regression model significantly predicted burnout (dependent variable), F (4, 196) = 66794.541, $p < 0.001$. The model explained 99% of the variance in burnout (dependent variable), $R^2 = 0.999$, adjusted $R^2 = 0.999$. Examination of individual predictors showed that self-efficacy ($\beta = 0.23$, $p < 0.001$) and work engagement ($\beta = -0.21$, $p < 0.001$) significantly contributed to the model, while leadership ($\beta = 0.16$, $p = 0.19$) and coping ($\beta = 0.31$, $p = 0.24$) did not -Table 4. These results suggest that the higher the self-efficacy and work engagement of an employee the lower is the level of burnout.

Table 4

Standardized Regression Coefficients (β) and Significance of Leadership, Coping, Self-Efficacy, and Work Engagement as Predictors of Burnout and Its Domains

Predictor	Overall Burnout (CBI) β (p)	Personal β (p)	Work β (p)	Client β (p)
Leadership	0.387 (0.019)	0.148 (0.472)	0.294 (0.061)	0.681 (< 0.001)
Coping	0.310 (0.024)	0.520 (0.003)	0.435 (< 0.001)	0.002 (0.989)
Self-efficacy	0.631 (< 0.001)	0.660 (< 0.001)	0.571 (< 0.001)	0.674 (< 0.001)
Work Engagement	-0.328 (< 0.001)	-0.329 (< 0.001)	-0.301 (< 0.001)	-0.358 (< 0.001)

3.2 Factor Predicted Domain-Wise Burnout

3.2.1 Personal-Related Domain

A multiple linear regression analysis was conducted to examine the extent to which self-efficacy, work engagement, leadership and coping predicted burnout at a personal-related domain (CBI). ANOVA results indicated that the overall regression model significantly predicted burnout at a personal-related domain (CBI) (dependent variable), F (4, 196) = 42186.416, $p < 0.001$. The model explained 99% of the variance in burnout at a personal-related domain (CBI) (dependent variable), $R^2 = 0.999$, adjusted $R^2 = 0.999$. Examination of individual predictors showed that self-efficacy (β = 0.06, $p < 0.001$) and work engagement (β = -0.05, $p < 0.001$) and coping (β = 0.14, $p = 0.003$) significantly contributed to the model, while leadership (β = 0.01, $p = 0.47$) did not -Table 4. These results suggest that the higher the self-efficacy and work engagement of an employee the lower is the level of burnout at a personal-related domain (CBI).

3.2.2 Work-Related Domain

A multiple linear regression analysis was conducted to examine the extent to which self-efficacy, work engagement, leadership and coping predicted burnout at a work-related domain (CBI). ANOVA results indicated that the overall regression model significantly predicted burnout at a work-related domain (CBI) (dependent variable), F (4, 196) = 73424.190, $p < 0.001$. The model explained 99% of the variance in burnout at a work-related domain (CBI) (dependent variable), $R^2 = 0.999$, adjusted $R^2 = 0.999$. Examination of individual predictors showed that coping (β = 0.16, $p < 0.001$), self-efficacy (β = 0.08, $p < 0.001$) and work engagement (β = -0.75, $p < 0.001$) significantly contributed to the model, while leadership (β = 0.04, $p = 0.06$) did not -Table 4. These results suggest that the higher the coping abilities, self-efficacy and work engagement of an employee the lower is the level of burnout at a work-related domain (CBI).

3.2.3 Client-Related Domain

A multiple linear regression analysis was conducted to examine the extent to which self-efficacy, work engagement, leadership and coping predicted burnout at a client-related domain (CBI). ANOVA results indicated that the overall regression model significantly predicted burnout at a client-related domain (CBI) (dependent variable), F (4, 196) = 45457.427, $p < 0.001$. The model explained 99% of the variance in burnout at a client-related domain (CBI) (dependent variable), $R^2 = 0.999$, adjusted $R^2 = 0.999$. Examination of individual predictors showed that leadership (β = 0.09, $p < 0.001$), self-efficacy (β = 0.08, $p < 0.001$) and work engagement (β = -0.07, $p < 0.001$) significantly contributed to the model, while coping (β = 0.001, $p = 0.98$) did not -Table 4. These results suggest that the higher the available supportive leadership, self-efficacy and work engagement of an employee the lower is the level of burnout at a client-related domain (CBI).

3.3 Nursing Sample Group Level Comparison

To compare the both groups of nurses (nursing leaders and general nurses), an independent sample t-test was conducted as presented in Table 5. The score of General Self-Efficacy was significant among general nurses [Mean = 59.44, SD = 14.25] in comparison to leaders' group [Mean = 56.92, SD = 19.05]. Additionally, the scores of client-related burnouts, coping and overall self-efficacy were slightly higher among general nurses but at descriptive perspective were not significant.

In contrary, higher mean score were traced among leaders' group in overall work engagement, absorption, vigour, and overall CBI score [M = 40.24 vs. 34.36] where personal and work-related burnout domains shown highest mean difference.

Table 5

Mean, SD, t-test and p-value of Nursing Leaders and General Nurses in Relation to Study Variables

Variable	Nursing Leaders Mean ± SD	General Nurses Mean ± SD	t-test	p-value	Cohen's d	Effect Size
CBI Score	2.31 ± 0.58	1.82 ± 0.68	3.89	< 0.001	0.73	Medium–Large
CBI_Personal-related	2.15 ± 0.57	1.53 ± 0.78	4.39	< 0.001	0.83	Large
CBI_Work-related	2.34 ± 0.47	1.91 ± 0.73	4.36	< 0.001	0.62	Medium
CBI_Client-related	2.42 ± 0.99	2.01 ± 0.85	2.53	0.012	0.48	Medium
Self-Efficacy Score	2.90 ± 0.40	2.93 ± 0.47	-0.37	0.712	-0.07	Negligible
General Self-Efficacy	3.16 ± 0.34	3.04 ± 0.57	1.64	0.106	0.23	Small
Social Self-Efficacy	2.55 ± 0.56	2.78 ± 0.52	-2.31	0.022	-0.44	Medium
Work Engagement Score	3.69 ± 1.27	3.30 ± 1.70	1.54	0.129	0.24	Small
Work Engagement _Vigour	3.45 ± 1.19	3.22 ± 1.76	0.91	0.364	0.14	Small
Work Engagement _Dedication	4.04 ± 1.54	3.62 ± 1.98	1.35	0.182	0.22	Small
Work Engagement _Absorption	3.64 ± 1.22	3.09 ± 1.55	2.25	0.028	0.36	Small–Medium
Leadership Score	3.69 ± 0.77	3.44 ± 0.78	1.70	0.090	0.32	Small
Coping Score	2.76 ± 0.47	2.83 ± 0.71	-0.75	0.456	-0.11	Negligible

t = independent samples t-test; p = significance level (two-tailed). Values with $p < 0.05$ are considered statistically significant. Nursing Leaders (n): 34, General Nurses (n): 163

Table 5. presents the significant differences which were observed between the two groups in total burnout ($t = 3.89$, $p < 0.001$, $d = 0.73$), personal burnout ($t = 4.39$, $p < 0.001$, $d = 0.83$), and work-related burnout ($t = 4.36$, $p < 0.001$, $d = 0.62$), demonstrating moderate to large effect sizes.

In addition, client-related burnout ($t = 2.53$, $p = 0.012$, $d = 0.48$) and social self-efficacy ($t = -2.31$, $p = 0.022$, $d = -0.44$) displayed moderate effects. Other variables established small or negligible effect sizes, signifying limited practical significance regardless of statistical findings.

4. DISCUSSION

This cross-sectional study intended to examine the prevalence of job frustration, associated variables and related policy implications among both groups of nurses (general nurses and nursing leaders) working in mental health setting in Oman. The findings provided a data-driven evidences for improving workplace environment as per the objectives of this study.

4.1 Group-Wise Job Frustration Prevalence

This study supports the global evidences in significantly finding that nurses have moderate to high burnout and nursing leaders' burnout is higher than general nursing working in mental health setting. Nursing leaders job frustration is mainly poured in the context of personal and work-related domains of the overall emotional exhaustion whereas general nurses had shown lower overall frustration due to the limited involvement in managerial responsibilities although having high clinical workload. These interpretations mirror the global evidences of unspoken stressors of leaders indicating the need toward leadership-related interferences. In Oman, the leaders find it difficult to speak up about stressors due to fear of being blamed or may affect their stability in their position (Kaluza et al., 2020). .

4.2 Sociodemographic Variables Association

The socio-demographic variables (age, gender, professional qualification, workplace allocation and length of experience) showed a significant association toward job frustration except marital status. The younger nurses with less years of experience presented higher frustration explained in their lack of coping skills and self-efficacy. There is little empirical data from the Omani mental health setting to support the association between occupational stress and job frustration and an elevated risk of turnover intention in nursing populations. Specifically, there is still a lack of research on how much organizational and psychosocial factors affect mental health nurses' job dissatisfaction. By investigating the relationships between burnout, self-efficacy, leadership perspective, coping mechanisms, and work engagement as potential predictors of job discontent in this cohort, the current study fills this knowledge vacuum.

Female nurses regardless of their marital status have higher frustration due to dual responsibilities towards professional demands and societal commitments which is common in Omani culture. According to nursing research, female healthcare workers are more likely to face conflicting demands between work and family duties, which could lead to increased psychological and emotional strain at work. Additionally, nurses who have higher qualification reported frustration towards limited career growth and promotional opportunities. Their higher aspirations for professional growth and promotion, which might not always coincide with the existing organizational structures and advancement pathways, could help to explain this. Higher educational attainment may lead to job discontent and frustration if it is not accompanied by possibilities for career advancement. Moreover, place of work (clinical or administration) both has its own focused pressure. To illustrated, leaders are pressured from workplace bureaucracy and task accountabilities whereas general nurses pressured towards loaded expectation for patient care. The socio-demographic factors have critical influence over occupational frustration leading to potential burnout and turnover.

4.3 Psychosocial and Organizational Variables Predictors

The findings of the regression analysis demonstrated significant association of self-efficacy and work-engagement as a protective factor to job frustration while leadership and coping measures represented domain-related influence. Nurses who presented higher engagement at work tasks showed higher confidence and motivation. The overall coping strategies showed higher effect on personal and work-related domain of burnout with variations in impact highlighting the need for developing data-driven adaptive coping guidelines. Unexpectedly, leadership effect was inconsistent however influential where it did not show significant effect on personal and work-related domain whereas it was protective toward client-related burnout. This suggests that authentic leadership approach and reciprocal approach helps nurses harmonize with the work and personal related stressors as well as meet the challenges towards client-care. This implies that leadership alone is not sufficient to manage occupational frustration unless it is coordinated with adaptive coping skills, personal efforts of having intrinsic self-efficacy and supportive environment for being engaged in decision-making.

However, until today, the healthcare work environments are not free from coercion and discrimination as per the findings of this study within Oman's mental health setting contradicting the WHO's principles to achieve by 2030 (WHO, 2016). However, the findings of this study can be utilized to move towards providing a safe and decent work environment through policy development and allegations.

The emotional well-being of nurses in Oman is under high risk for long-term effects of burnout which is believed to affect their self-efficacy as per global evidences as consequence (Henrich et al., 2017; Mudallal et al., 2017). The healthcare services in Oman is under development phase where both groups of nurses' experience job insecurity of being re-allocated. This is evidenced to cause emotional exhaustion as per local evidences (Al-Khanjari & Al-Abri, 2020) counter supported with the findings of the current study. Therefore, the data obtained from this study may intend to support the overall practice and management system through policy development and allegations.

4.4 Multidimensional Psychosocial Interpretation of Well-being

With moderate to large effect sizes, the current findings show that nursing leaders had far greater levels of burnout than general nurses, especially in terms of overall burnout, personal burnout, and work-related burnout. These effects' magnitude ($d = 0.62–0.83$) indicates both statistical significance and significant practical differences, suggesting that leadership responsibilities in nursing are linked to significantly higher psychological burden. This tendency is in line with previous research, which emphasizes that leadership roles frequently entail more administrative duties, decision-making authority, and role conflict —all of which raise stress and burnout levels.

The particularly significant impact on personal burnout ($d = 0.83$) indicates that leadership has an effect on a person's general physical and emotional tiredness in addition to professional stress. In healthcare systems, where leaders are required to sustain performance while managing workforce and

organizational challenges, this may imply cumulative stress exposure and limited opportunity for restoration. The Job Demands–Resources (JD-R) framework, which links high job demands with a lack of organizational or human resources to an elevated risk of burnout, might be used to interpret these data (Granger et al., 2024).

Additionally, client-related burnout showed a moderate impact size (d = 0.48), suggesting that, while to a smaller degree than in the personal and professional domains, leaders may also encounter stress in their contacts with patients or service recipients. Reduced direct patient contact among executives may account for this, but emotional accountability for staff performance and patient outcomes may still be a factor in this type of burnout.

The substantial difference in social self-efficacy between nursing leaders and general nurses is one noteworthy finding (d = -0.44). This moderate effect implies that leaders may feel less confident in social or interpersonal interactions even when they hold higher hierarchical positions. This could be explained by emotional tiredness, heightened interpersonal demands, or the difficulties of team management, all of which have the potential to gradually reduce perceived social competence. This result is consistent with theoretical viewpoints that contend the long-term stress, especially in socially demanding situations, might have a detrimental effect on self-efficacy beliefs.

Other variables, on the other hand, showed tiny or insignificant impact sizes, suggesting that while certain differences might be statistically significant, their usefulness is restricted. This emphasizes how crucial it is to take effect sizes into account in addition to p-values in order to prevent overinterpreting small differences. Additionally, it implies that some psychological resources, such features of job engagement and general self-efficacy, could be comparatively constant across roles, possibly due to company culture and shared professional training.

Overall, our results highlight the fact that, whereas other psychological characteristics are largely similar, nurse leadership is linked to a unique profile marked by increased burnout and decreased social self-efficacy. This highlights the necessity of focused interventions that are especially focused on the well-being of leaders, namely addressing interpersonal functioning and emotional exhaustion.

4.5 Limitations

Despite the significant insights and findings were addressed in this study, there are notable limitations acknowledged. Firstly, the study was cohort specific which was conducted in mental health setting among nursing professions only. Therefore, the sample representativeness issue arises limiting the generalizability to other healthcare team specialties or even other nursing specialties. A broader group of participants may be considered to improve applicability through cross-validation in different setting or group of HCWs with more sample size. Secondly, response bias may possibly be introduced due to the frequent encouragement from the researchers and data collectors to the participants to respond resulting in potential skewness of the findings. Thirdly, cultural inspiration affecting the response specially within the Arab cultural background where challenges are mostly underreported and may lead

to social desirability bias. It is recommended to consider other data collection approaches such as anonymous one-to-one interview.

4.6 Recommendations

About the findings, all the data needs to be considered to drive policies, interventions, guidelines and practices. It is recommended that leaders need to match roles with qualifications and avoid personal partialities among subordinates. Additionally, to enhance efforts to improve employee engagement in decision-making or even prior notification before implementation (Khadhouri, 2018). Similarly, attempts to criticize actions or behaviors need to be constructive with a reflective and positive reciprocal approach. Leaders should consider psychological debriefing not merely technical work-related issues avoiding one-way commands. Furthermore, a clear path to problem resolution has to be followed for a harmonious work environment. A culture of no blame should be emphasized ensuring a secure workplace. A well-defined work engagement practice enhances responsiveness and commitment levels which will ultimately improve the retention process.

In addition, it is recommended to reduce working hours or even introduce flexible working time to reduce emotional frustration (Shanafelt et al., 2016). This is considered a sort of reward for the effort invested by healthcare workers. Healthcare managers play a great role in setting strategies to help nurses meet both work and personal life demands to minimize turnover rate. In alignment with the latest technological advancements, it is found that tele-interactive learning sessions regarding clinical management issues had significantly enhanced self-efficacy (Kim & Suh, 2018). Therefore, it is important to enhance employee self-efficacy by allowing time for practising hobbies and personal life activities. Balancing the work requirement with the personally requested duties of the staff is a path towards staff satisfaction.

The results of this study demonstrate that mental health nurses experience professional frustration, especially with regard to workload, emotional demands, and perceived organizational support. Interventions that focus on the structure of the workplace may be able to lessen these pressures in this situation. For instance, prior research indicates that implementing flexible scheduling and cutting back on excessive working hours can enhance work-life balance and lessen emotional weariness in healthcare personnel (Shanafelt et al., 2016). These tactics might be especially useful in situations where high workloads and emotional demands have been found to be significant factors to frustration.

Additionally, the results of the study show that self-efficacy is a significant connected construct that affects nurses' perceptions of occupational frustration. Accordingly, it has been demonstrated that healthcare professionals' self-efficacy is improved by structured learning opportunities, such as digital and tele-interactive training sessions (Kim & Suh, 2018). Therefore, enhancing self-efficacy may help nurses better handle emotional and clinical difficulties.

In general, mental health nurses may have more job satisfaction and less occupational dissatisfaction if organizational workload concerns and individual psychological resources are addressed.

Moreover, Cox (2016) emphasized that setting standards and training opportunities through an evidence-based approach to the workforce is the core focus for enhancing their scope of practice. This will lead to having a positive view of oneself and then the overall profession, thus reducing work-related frustration. This fact is supported by better determination, clarity and perception of the roles of nursing leaders in mental health settings.

An appropriate system of feedback and reward is important to be activated in a manner that is directive for future actions as well as motivation for good performance. There are several environmental factors supporting the continuum of individual frustration. In addition, top managers and policymakers adopt a set of strategies and modalities to improve the work environment and tackle losing experienced nurses through mainly improving nursing leadership competencies such as decision making and empowerment (Hayward et al., 2016; Mudallal et al., 2017). Evidences suggested nurse manager to support a transparent and respectful work environment (Diab & Mohamed, 2020). This approach will further enhance breaking down the silence behaviour of nurses.

The study's conclusions emphasize how crucial organizational and leadership-related elements are in determining how frustrated mental health nurses feel at work. Concerns about perceived organizational support, professional development opportunities, and role clarity in particular were found to be significant contextual factors affecting nurses' experiences.

According to earlier research, nurses' professional confidence and perceived scope of practice can be improved by using evidence-based workforce development techniques, such as competency-based development and organized training (Cox, 2016). By improving the clarity of responsibilities and expectations in mental health settings, such modifications may lead to a more positive professional self-perception and a decrease in occupational frustration.

Additionally, it has been determined that supportive leadership practices—such as feedback mechanisms, recognition systems, and participatory decision-making—are crucial for enhancing the workplace and keeping nursing personnel (Hayward et al., 2016; Mudallal et al., 2017). Improved psychological safety and a decreased unwillingness to voice issues at work have also been linked to open and courteous communication between nursing staff and management (Diab & Mohamed, 2020). Overall, these results imply that improving organizational support networks and leadership skills may assist address workplace elements that contribute to mental health nurses' occupational discontent.

Additionally, a flexible leadership approach and rotation policy manages the levels of tiredness and occupational risks among employees which in turn increased the degree of reported wellbeing among them (Sebastiano et al., 2017). Similarly, evidence on the mental health workforce including nurses showed that healthcare institutions need to develop leaders’ 'soft skills' in addition to their practical skills to support courteousness in the work environment (Yanchus et al., 2017). In considering the mental health setting, soft skills of leaders such as empathy, empowerment and communication skills are basic requirements to avoid frustration among the team on the first level. In terms of supporting better communication as a soft skill of any leader in a mental health setting, it is crucial to meet healthcare

workers' satisfaction to aid institutional steadiness and ensure patient safety (Vemeir et al., 2017). This would be achieved through adopting an institutional wide data-driven prevention and intervention program which targets optimizing various measures of interpersonal and professional communication approach. In addition, it is recommended that a combination of both transformational and transactional leadership styles will ultimately reduce the level of nursing job frustration and burnout (Ebrahimzade et. al., 2015). This is because these styles of leadership in combination will act to boost creativity, enhance motivation and strengthen work collaboration. Finally, while the above slight differences in the findings suggest varying experiences across roles (general nurses and nursing leaders), formal significance testing (Levene's test and p-values) should be integrated in future comparative analysis.

The results of this study demonstrate how organizational communication and leadership affect mental health nurses' experiences of occupational frustration. Perceptions of workplace communication and leadership support in particular were found to be significant contextual factors influencing how nurses responded to demands at work.

According to Yanchus et al. (2017), there is evidence that effective leadership in healthcare settings involves interpersonal or "soft" abilities like empathy, communication, and staff empowerment in addition to technical competencies. These abilities may help foster a more courteous and encouraging workplace, which can lessen conflict and enhance employee satisfaction.

Similarly, fostering a healthy work environment and improving organizational functioning have been found to depend heavily on leaders and healthcare personnel communicating well (Vermeir et al., 2017). Supportive leadership communication may be essential for lowering workplace stress and enhancing employee well-being in mental health settings, where emotional and interpersonal demands are especially high. Overall, our results imply that improving leadership soft skills could be a crucial organizational tactic for resolving issues that lead to mental health nurses' job dissatisfaction.

In an effort of scholars’ previous recommendation in similar studies in Oman on private sectors (Khadhuri, 2018; Durrah, 2020; Durrah et al., 2023), this study was conducted to find out the differences and similarities in concern to internal and external factors to job frustration particularly self-efficacy, leadership, work environment and engagement among Omanis.

Overall, workplace environment-related issues and reciprocal approaches are the backbone of organizations’ integrity. Therefore, concerning to mental health hospitals, some policy allegations were highlighted in this study. The scope of practice of nurses working in the mental health field needs revision. To protect the personal lives of individuals from work-related obligations, it is required to design a clear guide to prioritize tasks according to immediacy and urgency as well as after-duty approach. It is essential to set criteria for reward as a system to acknowledge. Likewise, the policymakers need to revise the financial allowances for those who are holding extra responsibilities i.e. management. Moreover, to achieve workload balance, it is indicated to foster a culture of re-allocation of staff from acute wards to rehabilitation wards. Overall, unnecessary policies need to be merged, deleted and clarified. For the expatriate workforce, the national level guide should be in place for prior notification of

the possibilities of termination due to Omanization within not less than six months. As well as, the findings of this study will help in developing future management strategies to overcome increasing levels of burnout due to job frustration.

5. CONCLUSIONS

Indeed, as among the rare studies conducted in Oman's mental healthcare setting addressing employee job frustration it can build the basis for further knowledge in this area of research. In Oman, mental health nurses face serious issues of job frustration due to lack of role clarity and engagement, adaptive coping skills, leadership approach and low self-efficacy. This cross-sectional study findings indicated that the work engagement and self-efficacy had a protective effect on job frustration. Whereas, leadership presented inconsistency in influencing frustration described as domain sensitive effect where it has protection in client-related domain. Therefore, leadership practices focusing on resiliency, accessibility, reciprocity of approach and cultural awareness guidance is emphasized.

This study highlights the job frustration as not being merely an individual issue, it is as well an organizational level challenge. Therefore, adaptive coping on both personal (self-awareness, self-regulation, withdrawal) and organizational (no-blame culture, safety and security, promotional and career developmental opportunities and supportive leadership) level interventions are required. By considering these aspects, this study provides insights based on data obtained for managers, policymakers and researchers towards the employee welfare measure. Consequently, the Omani mental healthcare system is fostered towards resilient, transparent and reformed workplace environment for better retention and satisfaction.

Abbreviations

JF
Job Frustration
MHNs
Mental Health Nurses
GCC
Gulf Corporate Countries
SES
Self-Efficacy Scale
UWES
Utrecht Work Engagement Scale
CS
Coping Scale
CKQ
Conger-Kanungo Questionnaire
CBI

Copenhagen Burnout Inventory
PR
Personal-Related
WR
Work-Related
CR
Client-Related
SD
Standard Deviation
WHO
World Health Organization
HCWs
Health Care Workers
UNIMAS
Universiti Malaysia Sarawak
MOH
Ministry of Health

Declarations

Ethical Consideration

Prior ethical approval was obtained from the University Malaysia Sarawak (UNIMAS) Medical Research Ethics Committee (No.: FME/22/65) and the Research Approval Committee at MOH in Oman (No. Moh/CSR/22/25809). All procedures performed in this study were conducted in accordance with the ethical standards of the institutional research committee and the Declaration of Helsinki. Informed consent was considered while the participates agreed to answer the online (Microsoft forms) based questionnaire for the purpose of this study.

Consent for Publication:

Agreed by all authors

Conflict of Interest:

The authors declare that they have no competing interests

Funding:

The Ministry of Higher Education, Malaysia, funded this research (Ref. no: UNI/F05/RISE/85804/2023)

Author Contribution

AZ contributed in study conception and design, data collection, data analysis and interpretation and drafting of the article. YY contributed in study conception and design, data analysis and interpretation, drafting of the article and critical revision of the article. KS contributed in study conception and design, data analysis and interpretation, drafting of the article and critical revision of the article. HH contributed in data collection and critical revision of the article. RV contributed in data analysis and interpretation and critical revision of the article. MR contributed in critical revision of the article.

Acknowledgement

To the UNIMAS for supporting and funding the publication and Directorate General of Health Services-Muscat, Ministry of Health in Oman for providing support from proposal approval to the completion of the study.

Data Availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

References

1. Al Balushi, I. (2021). Measurement of Life-saving Training Impacts on Health Care Professionals Retention and Competence: and Patients' Outcomes. *Measurement*, *12*(10). DOI: 10.7176/JEP/12-10-03
2. Al Sabei, S. D., Labrague, L. J., Miner Ross, A., Karkada, S., Albashayreh, A., Al Masroori, F.,&Al Hashmi, N. (2020). 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. doi.org/10.1111/jnu.12528
3. Al-Adawi, S., Dorvlo, A. S., Al-Ismaily, S. S., Al-Ghafry, D. A., Al-Noobi, B. Z., Al-Salmi, A., ...&Chand, S. P. (2002). Perception of and attitude towards mental illness in Oman. *International journal of social psychiatry*, *48*(4), 305-317. doi.org/10.1177/002076402128783334
4. Al-Khanjari, Z., & Al-Abri, R. (2020). Mental health nurses' stress and coping mechanisms in Oman: A qualitative study. Journal of Psychiatric and Mental Health Nursing, 27(1), 12-19.
5. Al-Lawati, J. A., & Al-Maskari, A. (2017). Mental health in Oman: Public attitudes, knowledge, and beliefs. The Journal of Mental Health Policy and Economics, 20(1), 15-22.
6. Andalib, T. W., & Halim, H. A. (2020). A Conceptual Model to Resolve Frustration of Employees in the SMEs of Bangladesh. *Indian Journal of Science and Technology*, *13*(09), 1015-1026.

7. Conger, J. A., Kanungo, R. N., Menon, S. T., & Mathur, P. (1997). Measuring charisma: dimensionality and validity of the Conger-Kanungo scale of charismatic leadership. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, *14*(3), 290-301.
8. Cox, D. L. (2016). Strategic Planning Update. *AAACN Viewpoint*, *38*(5), 2.
9. Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health*, *2013*, 541-545.
10. Dall'Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: a theoretical review. *Human resources for health*, *18*, 1-17.
11. Diab G. M. and Mohamed S. M. (2020). Organizational justice and workplace spirituality: Their relation to organizational silence behavior among nurses. *Clinical Nursing Studies*, 8(4) 45-59
12. DURRAH, O. (2020). Injustice perception and work alienation: Exploring the mediating role of employee's cynicism in healthcare sector. *The Journal of Asian Finance, Economics and Business (JAFEB)*, *7*(9), 811-824.
13. Durrah, O., Alalyani, W. R., Allil, K., Al Shehab, A., Al Rawas, S., Hubais, A., & Hannawi, S. (2023). The Price of silence, isolation, and cynicism: The impact on occupational frustration. *Heliyon*, *9*(11).
14. Ebrahimzade, N., Mooghali, A., Lankarani, K. B., & Sadati, A. K. (2015). Relationship between nursing managers' leadership styles and nurses' job burnout: A study at Shahid Dr. Faghihi Hospital, Shiraz, Iran. *Shiraz E-Medical Journal*, *16*(8).
15. Granger, S., Stackhouse, M. R., & Caza, B. B. (2024). Job demands-resources (JD-R) theory. In *A guide to key theories for human resource management research* (pp. 126-132). Edward Elgar Publishing. doi.org/10.4337/9781035308767.ch15
16. Hamaideh, S. H. (2011). Job stress, burnout, and social support among psychiatric nurses in Jordan. Issues in Mental Health Nursing, 32(3), 178-186. doi.org/10.5172/conu.2011.37.2.173
17. Hayward, D., Bungay, V., Wolff, A. C., & MacDonald, V. (2016). A qualitative study of experienced nurses' voluntary turnover: learning from their perspectives. *Journal of clinical nursing*, *25*(9-10), 1336-1345.
18. Henrich, N. J., Dodek, P. M., Gladstone, E., Alden, L., Keenan, S. P., Reynolds, S., Holahan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. Journal of Personality and Social Psychology, 52(5), 946-955.
19. Kaluza, A. J., Boer, D., Buengeler, C., & van Dick, R. (2020). Leadership behaviour and leader self-reported well-being: A review, integration and meta-analytic examination. *Work & Stress*, *34*(1), 34-56. doi.org/10.1080/02678373.2019.1617369
20. Khadhuri, J. (2018). An examination of the predictors of work engagement of the health care workforce in OMAN and the UAE.
21. Kim, H., & Suh, E. E. (2018). The effects of an interactive nursing skills mobile application on nursing students' knowledge, self-efficacy, and skills performance: A randomized controlled trial. *Asian Nursing Research*, *12*(1), 17-25.

22. Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). *The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work & Stress, 19*(3), 192-207. DOI: 10.1080/02678370500297720
23. McShane S. L. and Von Glinow M. A. (2009) *Organizational Behavior* (5th ed.). NY: McGraw-Hill/Irwin.
24. Mudallal, R. H., Othman, W. A. M., & Al Hassan, N. F. (2017). Nurses' burnout: the influence of leader empowering behaviors, work conditions, and demographic traits. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, *54*, 0046958017724944.
25. Qutishat, M. G. (2024). Psychological distress and attitudes toward seeking professional psychological help among Omani nurses: Strategies for nursing practice. *Journal of Education and Health Promotion*, *13*(1), 325. *DOI:* 10.4103/jehp.jehp_209_24
26. Sadriwala, K. F., & Malik, M. (2021). Occupational Stress, Coping Strategies, and the Impact of Culture in the Middle East: A Systematic Review of Evidence from Oman. *Organizational Stress Around the World*, 194-220.
27. Sahraian, A., Shahraray, M., & Fatahi, A. (2013). Occupational stress in nurses working in medical and psychiatric wards: A comparative study. *International Journal of Community-Based Nursing and Midwifery, 1*(4), 182-190. **DOI:** 10.34172/ijcbnm.2013.032
28. Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2009). *The measurement of work engagement with a short questionnaire: A cross-national study. Educational and Psychological Measurement, 66*(4), 701-716. DOI: 10.1177/0013164409335202
29. Schwarzer, R. (1994). Optimism, vulnerability, and self-beliefs as health-related cognitions: A systematic overview. *Psychology and health*, *9*(3), 161-180. doi.org/10.1080/08870449408407475
30. Sebastiano, A., Belvedere, V., Grando, A., & Giangreco, A. (2017). The effect of capacity management strategies on employees' well-being: A quantitative investigation into the long-term healthcare industry. *European Management Journal*, *35*(4), 563-573.
31. Shanafelt, T. D., Dyrbye, L. N., West, C. P., & Sinsky, C. A. (2016, November). Potential impact of burnout on the US physician workforce. In *Mayo Clinic Proceedings* (Vol. 91, No. 11, pp. 1667-1668). Elsevier.
32. Vermeir, P., Degroote, S., Vandijck, D., Mariman, A., Deveugele, M., Peleman, R., ... & Vogelaers, D. (2017). Job Satisfaction in Relation to Communication in Health Care Among Nurses: A Narrative Review and Practical Recommendations. *SAGE Open*, *7*(2), 2158244017711486.
33. World Health Organization. (2016). Global strategy on human resources for health: workforce 2030.
34. Yanchus, N. J., Periard, D., & Osatuke, K. (2017). Further examination of predictors of turnover intention among mental health professionals. *Journal of psychiatric and mental health nursing*, *24*(1), 41-56.