

Association between Job Burnout and Severity of Menopausal Symptoms among staff Nurses

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Abstract:

Background:

One of the most important life transitions for women is menopause. Burnout not only disturbs nurses' well-being but also conceptions patient safety, leading to increased errors and decreased quality of care. **Aim:** To assess the association between job burnout and severity of menopausal symptoms among staff nurses. **Method:** the study was carried out using a correlational descriptive design. One hundred menopausal nurses were chosen as a purposive sample from various departments at Menoufia University Hospital in Shebin El-Kom. **Tools:** three tools were used; **Tool I:** was interview questionnaire regarding (socio-demographic characteristics, medical with surgical history, as well as obstetrical history) of the studied sample, **Tool II:** was Greene Climacteric Scale to assess severity of menopausal symptoms, **Tool III:** Maslach Burnout Inventory Scale to assess the level of burnout were used. **Results:** 72% of the nurses in the study had low personal accomplishment, 92% had depersonalization, and 79% had high emotional exhaustion. Sixty percent of the study participants experienced moderate menopausal symptoms. However, the lowest percentage (5%) had mild levels of menopausal symptoms. **Conclusions:** There was a statistically significant positive regression between emotional exhaustion, depersonalization, personal achievement, and menopausal symptoms. **Recommendation:** Health education programs related to identification and management of job burnout should be developed for menopausal nurses and other health care workers.

Key words: Job Burnout, and Menopausal Symptoms

Introduction

Professional burnout is a psychological reaction to ongoing emotional and interpersonal stress at work. When burnout develops, a variety of symptoms can be seen, including decreased self-accomplishment, guilt, or anxiety connected to one's job (Converso et al., 2019). Three components make up burnout: emotional weariness, depersonalization, and personal accomplishment. A sense of energy depletion is called emotional weariness. A greater mental separation from one's work is referred to as depersonalization. A feeling of inefficiency or lack thereof is referred to as reduced personal accomplishment (Cha, & Baek, 2023).

Burnout is prevalent among healthcare personnel, especially nurses, provoking negative impacts on morale, health outcomes and security, and efficiency. Consequences of burnout among nurses include the deterioration of patient care (through decreases in care quality and patient security), negative impacts on nurses' mental and physical health and institutional problems, with increased absenteeism and burnout-related sick leave (Castillo-González et al., 2024).

According to Aiken et al., (2023), burnout has become alarmingly common. There is a wide variability of burnout prevalence among different societies. Approximately 15% to 60%

of nurses' worldwide experience burnout, with other studies indicating that up to 91.1% of nurses have moderate to high degrees of burnout (Galanis, et al., 2023). A substantial percentage of workers are women and many continue to work while going through menopause (Viotti et al., 2021).

Menopause, which typically occurs between the ages of 45 and 55, marks the end of a woman's reproductive phase and monthly periods. A decline in reproductive hormones is the hallmark of this biological process, which happens naturally and can result in a variety of physical and mental problems. A woman's general health and well-being can be significantly impacted by menopausal symptoms such as hot flashes, nocturnal sweats, mood swings, sleep issues, and cognitive abnormalities (Santoro, Roeca, Peters, & Neal-Perry, 2021).

Menopausal women are often subjected to additional pressures in high-stress environments, such as healthcare, which can exacerbate pre-existing symptoms. The effects of menopause are especially noticeable in the workplace, where women frequently struggle to manage both the physical symptoms and the demands of their professional roles. Nurses, who perform physically demanding tasks while also dealing with the emotional labor of patient care, may experience more severe effects, such as fatigue, mood swings, and

decreased concentration (**Verdonk, Bendien, & Appelman, 2022**).

Menopausal symptoms have been linked to burnout, particularly emotional tiredness, in healthcare professionals. According to the majority of research **Conde, et al. (2021)** menopause impairs cognitive performance because it causes estrogen levels to drop. Estrogens influence parts of the central nervous system that govern language, judgment, assessment, learning, and the registering and retrieval of information (**Terzic et al., 2024**).

Moreover, there is mounting evidence that menopausal symptoms may impact work performance, resulting in absenteeism, lower productivity, and, in certain situations, early retirement from nursing (**Safwan, et al., 2024**). But menopause is still a subject that is frequently ignored in workplace regulations, and many women experience severe stigma when they talk to their employers about their symptoms (**Jack et al., 2021**).

Nurses are responsible for making critical clinical choices and are on the front lines of patient care in hospitals and other settings, frequently present when doctors are not because nurses play a vital role in providing and, in certain situations, managing patient care. Burnout among nurses may be linked to a variety of patient outcomes. Reduced patient satisfaction and safety and quality of care were linked to nurse burnout. Over time, these

correlations have remained stable across nurses' age, sex, work experience, and location (**Li et al.,2024**).

Burnout is a complex issue that must be addressed to improve nurse retention, advance healthcare quality, and maintain organizational performance. It impacts nurses' well-being and jeopardizes patient safety, resulting in more errors and lower quality of care (**Lim, Song, Nam, Lee, & Kim, 2022**).

Healthcare expenditures, individual health, and the quality of medical care are all significantly impacted by burnout. Patients also suffer from a number of adverse effects of medical staff burnout syndrome, including an increased chance of medical errors, a risk to the patient-provider relationship, and ultimately a compromise in the quality of the medical act. Preventive measures to avoid burnout syndrome, including early screening, continue to be the major goals of the treatment plan, focusing on both general tactics and the ideas of tailored methods (**Taranu et al.,2022**).

Long-term exposure to stressors at work can have serious negative effects, such as burnout, which can result in emotional weariness, depersonalization, and a loss of personal fulfillment. Emotions that are negative can also be caused by this illness. Sadly, studies have shown over and over again that nurses are more likely

than other healthcare workers to suffer from burnout syndrome. Burnout puts nurses at serious risk for both physical and mental health issues, which can interfere with their ability to provide high-quality nursing care (Wang et al., 2023).

According to Alkhraishi, Eivazzadeh, & Yeşiltaş, (2023), burnout in nursing has been associated with a considerable decline in job satisfaction, a decline in patient empathy, and general discontent with the field. Healthcare organizations must implement more inclusive and supportive policies, such as offering psychological support, raising awareness about menopausal health, and allowing for flexibility in working hours, in order to lessen the negative effects of menopause and burnout as well as the dual impact these conditions have on employee well-being and the quality of patient care, given the critical role nurses play in healthcare systems (Lamb, Spector & Chen, 2021).

Significance of the Study:

Among frontline healthcare workers globally, registered nurses make up the largest occupational group and account for 59% of all health professionals. Thus, the development of burnout has a definite detrimental effect on the workforce and healthcare quality, leading to higher rates of medical errors, worse patient satisfaction, and workforce turnover (Yang, Zhang, Guo, Wang, & Xie, 2024).

In Egypt, there is a wide variability of burnout prevalence among different societies. In terms of burnout dimensions, the biggest percentage of participants (24.0%) experienced depersonalization (DP), 19.0% experienced high levels of total burnout, and 75.0% experienced personal achievement (PA), followed by emotional exhaustion (EE) (59.0%) (Ahmed, Zenie, Hamdy, El Sayed & El Sebaie, 2024). Another study on the nursing staff of Beni-Seuf University Hospital reported the percentage of EE was 26.9%, the DP was 48%, and low PA was 2.2% (Elsheikh, & Naga, 2021).

Asiamah, Cronin, Abbott, & Smith, (2024) found that nurses who are dealing with both menopause and burnout are more likely to have lower job satisfaction, provide lower-quality patient care, and have a higher likelihood of quitting their jobs. Unfortunately, there is insufficient published data in Egypt concerning this issue, making it imperative to explore and shed light on this condition. Therefore, the purpose of this study is to assess the association between job burnout and severity of menopausal symptoms among staff nurses.

Aim of the Study: to assess the association between job burnout and severity of menopausal symptoms among staff nurses.

Research questions:

-What is the level of job burnout among staff nurses?

-What is the intensity of the symptoms of menopause among staff nurses?

-What is the association between burnout and the severity of menopausal symptoms among staff nurses?

Operational definitions of the variables:

-Job Burnout: - The response of nurses to ongoing work-related stress, including emotional exhaustion, depersonalization, and a decline in their sense of accomplishment, is referred to in this study as job burnout.

-Severity of Menopausal Symptoms: - This study examines the degree to which menopausal symptoms affect a nurse's physical, emotional, and psychological well-being.

Research design: The study employed a descriptive correlational design.

Research setting: Menoufia University Hospital served as the study's site, in Shebin El-Kom, Egypt, a facility established in 1993. With a capacity of 1,000 beds, the hospital comprises four buildings: The General Hospital, Emergency Hospital, Specialized Hospital (all interconnected), and an independent Oncology building. General Hospital serves all specialties (medical, surgical, orthopedics, maternity, pediatric) and has outpatient clinics, neonatal intensive care unit, hemodialysis unit. All the selected

units included in the study were specialty units to assess how menopausal symptoms relate to burnout syndrome among specialty units nursing staff. The rate of nurses at university hospital is around 1000 nurses 100 of them at menopausal age per year (2023).

Sample: The inclusion criteria, which included being actively engaged in the healthcare industry, being between the ages of 45 and 55, and self-reporting menopausal or peri-menopausal, were satisfied by a purposive sample of 130 female nurses who experienced menopause and came from the aforementioned settings. Nurses with psychiatric disorders or chronic illnesses that potentially skew the results were excluded in order to account for unrelated factors.

The sample size was calculated by estimating the sample size of staff nurses using the formula below (**Yamane, 1976**). There are 400 staff nurses in total ($n = N / 1 + N (e)^2 N$). Error tolerance (.05) $n \rightarrow$ sample size $e \rightarrow$ menopausal nurse $1 \rightarrow$ a constant value, the number of staff menopausal nurses in the sample is $= 400 / (1+400) \times (.05)^2 = 100$.

Tools:

Three tools were employed to fulfill the objectives of the present study.

-Tool I: An interview questionnaire, developed by the researchers according to review of literatures' (**Viotti, et al., 2021, Verdonk et al., 2022**), was used consists from:

Part 1-Demographic characteristics: Encompassing details such as age, marital status, educational level, job classification, and place of residence.

Part 2: Medical and Surgical History: Gathering data on any chronic illnesses and prior surgical procedures experienced by the nurses especially hysterectomy.

Part 3: Obstetric history: Covering information on age of menarche, age of onset menopause, type of menopausal status.

Tool II: Greene Climacteric Scale, it includes 21 items then modified & adapted into 19 items by the researchers from Greene, (1976) to assess severity of menopausal symptoms.

Tool III: Maslach burnout inventory scale (M.B.I):

This scale was constructed by **Maslach et al., (1996)** and used to measure the incidence frequency of burnout dimensions in nursing personnel. It is characteristically known as “the human services survey. According to (M.B.I), the inventory comprised of 22 statements and each measures three separate but interrelated dimensions of burnout. These three dimensions of burnout have been psychometrically organized into three subscales namely feelings of accomplishment, detachment, and emotional exhaustion. 1-Emotional exhaustion; Nine statements were used to measure this subscale, which measures of exhaustion and

overextension from one's job. A high level of burnout is correlated with a high emotional tiredness score.

2-Depersonalization; This subscale uses five statements to assess an emotionally distant and impersonal attitude toward work. A higher score in depersonalization suggests an increased degree of burnout.

3- Personal accomplishment; this subscale, based on eight statements, gauges the sense of achievement and competence at work. A low personal accomplishment score corresponds to a higher level of burnout.

Cut-off point of Maslach Burnout Inventory

Items	Low	Moderate	High
Emotional Exhaustion	≤18	19-26	≥27
Depersonalization	≤5	6-9	≥10
Personal accomplishment	40	34-39	≤33

Scoring system: A six-point scale was used to measure response frequency, with values from 0 (never) to 6 (every day). Zero means never, one means a few times a year or less, two means once a month or less, three means a few times a month, four means once a week, five means a few times a week, and six means every day.

Low personal accomplishment, high emotional tiredness, and depersonalization scores are all major indicators of burnout among nurses. These scores were divided into "Low, Moderate, and High" categories.

Nurses with moderate scores on all subscales tend to have moderate burnout, whereas those with low levels of emotional weariness and depersonalization and high levels of personal success tend to have minimum burnout.

Tool Validity: A panel of specialists, comprising two professors with expertise in maternal and newborn health nursing and one in administration nursing, examined the instrument to guarantee its validity. Three panel of experts—two professors from the Faculty of Nursing's mother and newborn health nursing department and one professor from the administration department—assessed the face and content validity of the instruments. Internal validity, completeness, relevance, topic coverage, question clarity, and content accuracy were the main evaluation criteria. Following their feedback, the required changes were made.

Tool reliability: Using the test-retest procedure with a two-week gap between assessments, the instrument's reliability was assessed among ten nurses. It was determined that the Cronbach's alpha coefficient between the two sets of scores was 0.78.

Pilot Study: To evaluate the instruments' viability, applicability, and comprehensibility, a pilot study involving 10 nurses—representing 10% of the entire sample—was carried out. Changes were made in response to the results of the pilot research. To

guarantee the stability of the results, these pilot subjects were later removed from the entire sample.

Ethical considerations: ethical cod (922) on 15 March 2023, the Faculty of Nursing at Menoufia University received clearance from the research and ethics commission. Methods to make sure the study took ethical considerations into account. Locked sheets with participant names substituted with numbers were used to maintain confidentiality. Nurses were guaranteed and used only for statistical analysis, and participation in the study is entirely voluntary. No personal information would be shared; the results would be presented as group data.

Procedure: The following steps were taken by the researcher to complete data collection:

- The researcher offered a verbal explanation of the study and introduced herself to the participants;
- Every participant received information about the study's objectives and their right to withdraw;
- Anonymity and confidentiality of the information gathered were ensured;

And the director of Menoufia University Hospital received a formal letter from the dean of Menoufia University Faculty of Nursing detailing the procedures and goals of data collection.

The six-month period from the start of June 2023 to the end of November 2023, was used for data collection.

The researcher spent Sunday, Monday, Wednesday, and Thursday at Menoufia University's hospital. Nurses were interviewed by the researcher twice daily.

The third phase involved the researcher using questionnaires to gauge how much job burnout affected nurses' menopausal symptoms. The researcher interviewed each nurse separately and documented their responses. The duration of each interview was 8–10 minutes.

Results

Table (1): displays the demographic details of the nurses under study. The majority of the nurses in the study (81%) were married, and the largest percentage (43%) was between the ages of 45 and under 50. About one-third (32%) of the nurses who were studied held a bachelor's degree in nursing science. Furthermore, the study sample's largest percentages (64%) and 71%, respectively, were nursing technicians and rural residents.

Table (2): displays the medical and surgical history of the studied nurses. As can be seen from that table, the majority of the nurses who were studied (42%) had chronic illnesses, with bone disease accounting for 20% of these cases. In terms of hysterectomy history, the vast majority of research participants (97%) had never had a hysterectomy.

Table (3): shows the studied nurses' obstetrical history. According to the data, 61% of the nurses in the study

had menarches before the age of 13. Additionally, nearly half (45%) of the nurses in the study were post-menopausal, with 48% of them having menopauses between the ages of 45 and 50.

Table (4): illustrates the intensity of the nurses' menopausal symptoms. The table shows that half of the nurses in the study (50%) had moderately severe symptoms of memory issues, pins and needles in any region of their body, and a fast or strong heartbeat. In terms of feeling tense or nervous, having trouble sleeping, experiencing anxiety or panic attacks, feeling exhausted or lacking in energy, losing interest in most things, experiencing pressure or tightness in the head, experiencing hot flashes, or losing interest in sex, the majority of the nurses in the study (61%, 70%, 55%, 65%, 52%, 51%, 64%, and 59%) had moderate severity, respectively. Nearly half of the nurses in the study (45%, 36%, 43%, 47%) experienced moderately severe menopausal symptoms, such as headaches, breathing problems, sweating, and feelings of unhappiness or depression.

Figure (1): clarifies the overall severity level of the nurses' menopausal symptoms. 60% of the study participants had mild menopausal symptoms, as the table illustrates. The smallest proportion (5%) did, however, exhibit mild menopausal symptoms.

Table (5): expresses the emotional exhaustion that the study's nurses experienced. Eighty percent of respondents stated that working with people all day required a lot of effort every day, and the majority (73%) said they felt emotionally exhausted by their work a few times a week. Approximately 43% of nurses reported that they were having occasional breakdowns due to their work. Sixty-eight percent of nurses reported feeling frustrated and sixty-five percent reported feeling overworked on a daily basis. Furthermore, 27% of nurses said they found working directly with people to be too stressful.

Table (6): demonstrates depersonalization among the studied nurses. Seventy-three percent said they never felt like they took care of certain clients or patients. When faced with another workday, more than one-fifth (21%) said they felt exhausted every day. Approximately 41% of them believed that occasionally each month, their patients held them accountable for their issues. Furthermore, no nurse ever felt "at the end of their patience" or "didn't care what happened to some patients/clients," according to 34% and 75% of researchers. None of the nurses (100%) ever felt "more insensitive to people since working," and the majority (76%) never felt "afraid this job is making them uncaring."

Table (7): lists the individual achievements of the nurses under study. More than half (57%) of nurses

said they accomplish a lot of worthwhile work every day. Once a month, the largest percentage of nurses (41%) reported feeling energized. Understanding the emotions of their patients or clients on a daily basis was easy for the majority of nurses (81%) to do. Furthermore, 75% of nurses reported being able to positively impact people on a daily basis and effectively address patients' issues. Approximately 71% of nurses handled emotional issues in a composed manner on a daily basis, and over two-thirds (68% and 69%) said they were able to establish a calm environment and felt rejuvenated after working closely with patients or clients each day.

Table (8): indicates the nurses' percentage distribution according to the burnout domains. The table shows that the majority of the nurses in the study experienced low levels of personal accomplishment (72%) and high levels of emotional weariness (79%) and depersonalization (92%).

Table (9): demonstrates the connection between the study's nurses' burnout domains and menopausal symptoms. There was a substantial positive correlation between depersonalization and emotional weariness ($r = 0.228$, $p = 0.023$). Additionally, there were significant positive correlations between menopausal symptoms and both personal success ($r = 0.206$, $p = 0.040$) and depersonalization ($r = 0.247$, $p = 0.013$).

Table (10): specifies predicted factors logistic regression analysis of nurse's burnout. As evident from that table, there was highly statistically significant regression between emotional exhaustion and menopausal symptoms. However, no statistically significant regression was found between emotional exhaustion and residence, marital status, employment, or age. The relationship between depersonalization and menopausal symptoms was statistically significant. Depersonalization was inversely correlated with age, occupation, marital status, and residence. Regression between place of residence and menopausal symptoms and personal achievement was highly statistically significant. However, there was no statistically significant regression between age, marital status, and employment and personal achievement.

Table (1): Demographic Characteristics of the Studied Nurses (N =100)

Demographic Characteristics	(N=100)	
	No.	%
Age		
Less than 45 years	16	16.0
45-50 years	43	43.0
Above 50 years	41	41.0
Marital status		
Single	5	5.0
Married	81	81.0
Divorce	3	3.0
Widow	11	11.0
Educational level		
Secondary Nursing Diploma	26	26.0
Associated Degree in Nursing or Technical Nursing	22	22.0
Bachelor degree in Nursing Science	32	32.0
Specialized Diploma in Nursing Science	17	17.0
Master and above	3	3.0
Job Classification		
Nurse technician (diploma school nurse)	64	64.0
Professional nurse	29	29.0
Head nurse	1	1.0
Nursing supervisor	6	6.0
Place of residence		
Rural	71	71
Urban	29	29

Table (2): Medical and Surgical History of the Studied Nurses (N =100)

Medical and Surgical Data	(N=100)	
	No.	%
Present chronic disease		
Yes	42	42.0
No	58	58.0
Type of chronic disease		
Hypertension	5	5.0
Heart disease	2	2.0
Diabetes	9	9.0
Chest diseases	6	6.0
Bone disease	20	20.0
History of Hysterectomy		
No hysterectomy	97	97.0
Total	1	1.0
Sub total	1	1.0
Radical	1	1.0

Table (3): Obstetrical History of the Studied Nurses (N =100)

Obstetric Data	(N=100)	
	No.	%
Age of menarche		
≤ 13 year	61	61.0
>13 year	39	39.0
Age at menopause		
Less than 45 years	16	16.0
45-50 years	48	48.0
Above 50 years	36	36.0
Type of menopausal status		
Perimenopause	42	42.0
Pre-menopause	13	13.0
Post-menopause	45	45.0

Table (4): Severity of Menopausal symptoms of the Studied Nurses (N =100)

Severity of Menopausal symptoms	(N=100)							
	Not at all		Mild		Moderate		Severe	
	No.	%	No.	%	No.	%	No.	%
Heart beating quickly or strongly	3	3.0	28	28.0	50	50.0	19	19.0
Feeling tense or nervous	1	1.0	19	19.0	61	61.0	19	19.0
Difficulty in sleeping	2	2.0	24	24.0	70	70.0	4	4.0
Memory problems	3	3.0	28	28.0	50	50.0	19	19.0
Attacks of anxiety, panic	4	4.0	25	25.0	55	55.0	16	16.0
Difficulty in concentrating	28	28.0	59	59.0	13	13.0	0	0
Feeling tired or lacking in energy	1	1.0	22	22.0	65	65.0	12	12.0
Loss of interest in most things	9	9.0	28	28.0	52	52.0	11	11.0
Feeling unhappy or depressed	1	1.0	30	30.0	45	45.0	24	24.0
Crying spells	20	20.0	42	42.0	38	38.0	0	0
Irritability	25	25.0	51	51.0	24	24.0	0	0
Feeling dizzy or faint	33	33.0	38	38.0	27	27.0	2	2.0
Pressure or tightness in head	21	21.0	21	21.0	51	51.0	7	7.0
Tinnitus (ringing or buzzing in the ear)	29	29.0	37	37.0	31	31.0	3	3.0
Headaches	4	4.0	27	27.0	36	36.0	33	33.0
Pins and needles in any part of the body	3	3.0	28	28.0	50	50.0	19	19.0
Breathing difficulties	13	13.0	41	41.0	43	43.0	3	3.0
Hot flushes	3	3.0	21	21.0	64	64.0	12	12.0
Sweating at night	3	3.0	35	35.0	47	47.0	15	15.0
Loss of interest in sex	2	2.0	33	33.0	59	59.0	6	6.0
Urinary symptoms	31	31.0	55	55.0	10	10.0	4	4.0
Symptoms due to vaginal dryness	2	2.0	49	49.0	36	36.0	13	13.0

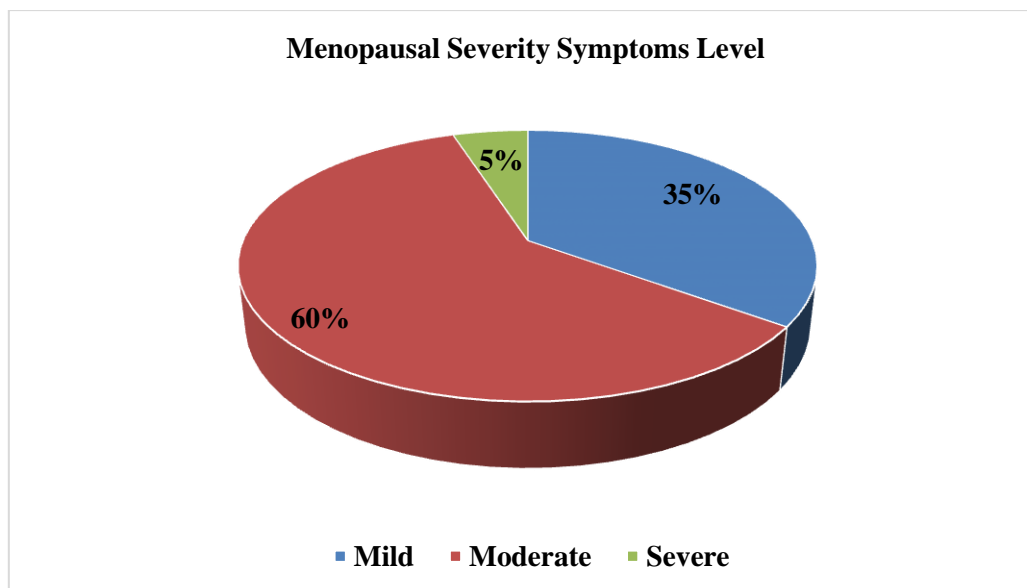


Figure (1): Total Severity level of Menopausal symptoms of the Studied Nurses (N =100)

Table (5): Emotional Exhaustion of the Studied Nurses (N =100)

Never	A few times per year	Once a month	A few times per month	Once a week	A few times per week	Every Day
No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
I feel emotionally drained by my work.						
0 (0%)	0 (0%)	13(13%)	0(0%)	0(0%)	73(73%)	14(14%)
Working with people all day long requires a great deal of effort.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	20(20%)	80(80%)
I feel like my work is breaking me down.						
0(0%)	43(43%)	34(34%)	0(0%)	23(23%)	0(0%)	0(0%)
I feel frustrated by my work.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	32(32%)	68(67%)
I feel I work too hard at my job.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	35(35%)	65(65%)
It stresses me too much to work in direct contact with people.						
7(7%)	6(6%)	3(3%)	32(32%)	22(22%)	27(27%)	3(3%)
I feel like I'm at the end of my rope.						
2(2%)	3(3%)	11(11%)	2(27%)	20(20%)	8(8%)	29(29%)

Table (6): Depersonalization of the Studied Nurses (N =100)

Never	A few times per year	Once a month	A few times per month	Once a week	A few times per week	Every Day
No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
I feel I look after certain patients/clients impersonally, as if they are objects.						
73(73%)	27(27%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
I feel tired when I get up in the morning and have to face another day at work.						
2(2%)	5(5%)	19(19%)	16(16%)	19(19%)	18(18%)	12(12%)
I have the impression that my patients/clients make me responsible for some of their problems.						
0(0%)	0(0%)	5(5%)	41(41%)	21(21%)	32(32%)	1(1%)
I am at the end of my patience at the end of my work day.						
34(34%)	5(5%)	4(4%)	13(13%)	18(18%)	26(26%)	0(0%)
I really don 't care about what happens to some of my patients/clients.						
75(75%)	23(23%)	1(1%)	1(1%)	0(0%)	0(0%)	0(0%)
I have become more insensitive to people since I've been working.						
100(100%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
I 'm afraid that this job is making me uncaring.						
76(76%)	2(2%)	3(3%)	0(0%)	1(1%)	18(18%)	0(0%)

Table (7): Personal Accomplishment Self-Assessment of the Studied Nurses (N =100)

Never	A few times per year	Once a month	A few times per month	Once a week	A few times per week	Every day
No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)	No.(%)
I accomplish many worthwhile things in this job.						
0(0%)	0(0%)	0(0%)	21(21%)	0(0%)	22(22%)	57(57%)
I feel full of energy.						
19(19%)	2(2%)	41(41%)	17(17%)	6(6%)	15(15%)	19(19%)
I am easily able to understand what my patients/clients feel.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	19(19%)	81(81%)
I look after my patients'/clients ' problems very effectively						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	25(25%)	75(75%)
In my work, I handle emotional problems very calmly.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	29(29%)	71(71%)
Through my work, I feel that I have a positive influence on people.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	25(25%)	75(75%)
I am easily able to create a relaxed atmosphere with my patients/clients.						
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	32(32%)	68(68%)
I feel refreshed when I have been close to my patients/clients at work.						
1(1%)	1(1%)	0(0%)	0(0%)	3(3%)	26(26%)	69(69%)

Table (8): Distribution of the Study Nurses' Percentages by Burnout Domains (N=100)

Burnout Domains	Low level		Moderate level		High level	
	No.	%	No.	%	No.	%
Total emotional exhaustion of the studied nurses	0	0	21	21.0	79	79.0
Depersonalization level of the studied nurses	0	0	8	8	92	92
Personal accomplishment	72	72	28	28	0	0

Table (9): Correlation between Burnout and Menopausal Symptoms of the Studied Nurses (N=100)

Variable			N=100			
			Emotional exhaustion	Depersonalization	Personal achievement	Menopausal symptoms
Burnout	Emotional exhaustion	r		.228		.024
		P		.023*		.809
	Depersonalization	r			.038	.247
		P			.708	.013*
	Personal achievement	r	-.032			.206
		P	.750			.040*

Table (10): Predicted Factors Logistic Regression Analysis of Nurse's Burn

Predicted factors effect on nurse's burnout	Emotional exhaustion		Depersonalization		Personal achievement	
	β	P	B	P	β	P
Menopausal symptoms	.124	.000**	.152	.000**	.173	.000**
Age	.259	.099	.131	.396	-.666	.353
Educational level	-.042	.949	-.023	.071	-.559	.211
Job	-.066	.783	-.090	.879	-.443	.409
Marital status	.011	.610	-.303	.483	-1.009	.205
Place of residence	-.110	.434	-.044	.750	3.630	.001**

Discussion

In addition to hormonal changes, psychological stress brought on by social variables at work and at home also plays a role in menopausal symptoms. Indeed, with more and more menopausal women working, stress at work is becoming a more significant role. There are intricate connections between menopausal symptoms and stress at work (**Sheng et al., 2021**).

More than two-fifths of the nurses in the study were between the ages of 45 and 50. The researchers believe this is most likely due to the fact that most women naturally experience menopause between the ages of 45 and 52.

This study's findings are consistent with those of **Willi et al. (2020)**, who investigated how past depression affected peri-menopausal experiences in Germany. The average age of menopausal women was 48.6 ± 3.9 years, according to their data from the Swiss Perimenopause Study. This study's results are in line with those of **Barati et al. (2021)**, who investigated the variables affecting postmenopausal women's quality of life in Asia. Their research indicated that fewer than two-thirds of the women were aged 40 to 50.

Moreover, this finding is congruent with the study by **Roesch et al. (2021)**, which focused on "The relationship between menopause and

marital satisfaction in adult women" in Germany. Their research concluded that every woman who surpasses the age of fifty-two undergoes a transitional phase known as menopause. From the researcher's point of view, menopause—can significantly influence emotional well-being and interpersonal relationships, including those within the workplace. Factors like hormonal changes, mood fluctuations, and physical discomfort associated with menopause may contribute to emotional exhaustion and job-related stress, particularly in demanding professions like nursing.

Mohamed and Mohamed (2018) examined menopausal symptoms and psychological problems in middle-aged Egyptian women, which is in contradiction to the results of the present study. The majority of individuals (more than three-quarters) in their study were over 50, with an average age of 53.6 ± 6.3 years. The difference between the present and previous study's results might be attributed to several factors such as genetic, environment factors and ethnic differences.

With reference to obstetrical history, the study's findings showed that almost three-fifths of the nurses in the study had menarches before the age of 13. According to the researchers, this could be because puberty begins in females between

the ages of 12 and 16, and menarche coincides with puberty. The results were consistent with those of **Ramraj et al. (2021)**, who conducted research in India on the topic of "Age of menarche between generations and the factors associated with it Clinical Epidemiology and Global Health" and found that teenage females' menarche at an average age of 12.5 ± 1.42 .

Furthermore, **Mehaseb, Omran, & Gafer, (2018)**, who studied "the Effect of Menopausal Symptoms on Women's Quality of Life" in Brazil, confirmed this conclusion by stating that the menarche takes place between the ages of 12 and 14, with a mean \pm SD of 13.17 ± 1.43 .

The study found that moderate severity was reported by half of the nurses for symptoms like heart palpitations, memory problems, and tingling sensations. The most prevalent symptoms with moderate severity included feelings of tension or nervousness, difficulty sleeping, anxiety, fatigue, loss of interest in daily activities, head pressure, hot flashes, and reduced libido. Nearly half of the nurses also experienced moderate severity for symptoms such as feeling unhappy or depressed, headaches, breathing difficulties, and night sweats.

Over a third of the studied nurses had mild severity of menopausal symptoms regarding to (crying spells,

feeling dizzy or faint, tinnitus (ringing or buzzing in the ear), and symptoms due to vaginal dryness) respectively.

In addition, highest percentage of the studied nurse had mild severity of menopausal symptoms regarding to (difficulty in concentrating, irritability, urinary symptoms) respectively. According to the researchers, Hormonal replacement therapy, which can reduce the severity of menopausal symptoms that may be brought on by a drop in estrogen, was unknown to most menopausal women.

Study by **Bahiyah Abdullah, Moize, Ismail, & Zamri, (2017)**, Who examined "Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their treatment seeking behavior". The study's findings are in line with this one. It was discovered that menopausal women experienced more hot flashes, sleep issues, anxiety, and a decreased desire for intercourse, whereas urogenital issues were less prevalent.

Khatoon, Sinha, Shahid, & Gupta, (2018) also evaluated the "Assessment of menopausal symptoms using the modified Menopause Rating Scale (MRS) in women of Northern India," and these results support their findings. Their study found that hot flashes, anxiety attacks, sleep disturbances, and

exhaustion were the most prevalent menopausal symptoms; urinary and sexual issues were less prevalent. These findings also align with a study conducted in India by **Ramyashree, Veigas, & Kanagal, (2024)** on the impact of menopausal symptoms on working women's quality of life." They found that women going through menopause tended to report fewer sexual and urogenital symptoms and more emotional and physical symptoms.

According to the study, working with people on a daily basis required a lot of effort, and the majority of nurses said they felt emotionally exhausted by their jobs multiple times a week. Several times a year, more than two-fifths of nurses reported feeling depressed by their jobs. The majority of nurses reported feeling they worked too hard and being frustrated with their jobs on a daily basis. Furthermore, working directly with people only a few times a week caused stress for over 25% of nurses. From the researcher's point of view, these findings highlight the significant emotional and psychological demands placed on nurses in their daily work. The , reduced capacity for employment and worse self-reported health.

The research carried out in the Netherlands by **Verdonk et al. (2022)** on "Menopause and work: A narrative literature review about menopause,

frequent reports of emotional exhaustion, frustration, and feelings of being overworked suggest that the nursing profession involves high levels of occupational stress.

According to the current study, a study on "Unveiling the role of the work environment in the quality of life of menopausal physicians and nurses" was carried out in Russia by **Bapayeva et al. (2023)**. According to their research, menopause symptoms like exhaustion and low energy can have a detrimental effect on women's quality of life.

Besides, these findings were consistent with Oude **Hengel et al., (2023)** who carried out their research in the Netherlands on " Perimenopause: Symptoms, work ability and health among 4010 Dutch workers" and showed that almost one fifth of the participants were in the perimenopause stage (n = 743). Menopausal symptoms were reported by 80% of the women, with 27.5% stating that they happened "often" and 52.5% stating that they happened "sometimes." It was discovered that these symptoms were linked to increased emotional exhaustion

work, and health" is consistent with these findings. According to their research, menopausal symptoms can destabilize energy balance and overstress the psychophysiological system when combined with job

demands, which can impair one's capacity to perform.

These results align with the findings of Hardy, Thorne, **Griffiths, & Hunter (2018)**, who looked at the work outcomes of German women in their midlife. They found that age-related declines in work ability are common and difficult to reverse biologically, especially for women over 50. Menopausal symptoms can affect women's physical and mental health at work for a long time, even though they are usually a passing phase.

The fact that menopausal symptoms frequently lead to energy depletion, leaving menopausal women feeling worn out and exhausted at work, helps to explain why the results of the current study and previous studies agree

The results of a systematic review of "Work environment and burnout symptoms" among Japanese women in Japan by **Aronsson et al. (2017)** are in contrast to these findings. They found that menopausal vasomotor symptoms have minimal impact on the ability to perform job tasks.

The current study showed that the majority of the studied nurse experience occupational depersonalization in terms of they every day experienced the item "I feel I look after certain patients/clients" impersonally. Also, they every day expressed "I am at the end of my

patience at the end of my workday "and" I really don't care about what happens to some of my patients/clients". Additionally, the majority of them admitted that "I'm afraid this job is making me Uncaring" and "I have become more insensitive to people since I've been working."

This may be explained by the effects of menopause on healthcare professionals, which include irritability, a decline in energy and focus at work, and the potential for menopausal women to feel worn out at work.

According to **Converso et al. (2019)** study on "menopausal symptoms and burnout" in Turin, Italy, nurses who experienced menopause and had little social support were more likely to become depersonalized.

Also, these findings supported by **Kiss et al. (2024)** research on "need for recovery after work and associated risk factors in working menopausal women" in Belgium. They displayed that further than half of symptomatic menopausal women experience difficulties at work and risk of burnout so more awareness of menopause in the workplace is important and needed.

These findings were in the same line with **Marzo et al. (2022)** who conducted a study in Malaysia about "Burnout, resilience and the quality of life among Malaysian healthcare

workers during the COVID-19 pandemic” and they stated that about half of the healthcare worker’s professionals suffered from occupational exhaustion and depersonalization with impaired personal accomplishment.

These findings were contradicted with the study that was carried out by **Terzic et al. (2024)** in Astana (Kazakhstan) on "Association between menopause and occupational burnout in healthcare workers: a cross-sectional study." They demonstrated how many respondents experienced burnout and how postmenopausal workers were more likely to experience burnout, although menopause was not substantially linked to disengagement, depersonalization, or tiredness.

The study revealed that most of the nurses did not express statements of personal accomplishment such as "I am easily able to understand what my patients feel" or "I look after my patients’ problems very effectively." They also did not report "Through my work, I feel that I have a positive influence on people." Furthermore, over two-thirds of the nurses never felt "I am easily able to create a relaxed atmosphere with my patients/clients."

The alteration may be attributed to change in the levels of hormones all at once, and these interact with the thyroid and adrenal glands' endocrine

hormones linked to energy, which can be difficult for the body and cause crushing fatigue. In addition to numerous outside pressures and obligations, including work and home life, this can cause feelings of overwhelm.

The results of this study are consistent with the findings of **Viotti et al. (2021)** in their research on "Do menopausal symptoms affect the relationship between job demands, work ability, and exhaustion?" in Italy. They demonstrated that women with more intense menopausal symptoms face greater challenges in managing job demands and maintaining their work performance, suggesting that interventions are crucial to prevent harmful effects on menopausal women and their organizations.

According to **Ndindeng (2024)**, hot flashes, sleep issues, and mood swings are menopausal symptoms that can have a detrimental impact on one's ability to complete personal goals and work output, which in turn causes lower productivity and higher absenteeism. Additionally, according to a study done in Malaysia by **Marzo et al. (2022)**, about half of the healthcare personnel had impaired personal accomplishment

In their study "Impact of Menopausal Symptoms on Work: Findings from Women in the Health and Employment After Fifty (HEAF)" in

England, **D'Angelo et al. (2022)** corroborated the present findings. They found that menopausal symptoms caused a decline in personal accomplishment and substantial coping challenges at work for almost one-third of women.

The results showed a strong positive regression between emotional weariness, depersonalization, menopausal symptoms, and personal achievement. Menopausal nurses may be experiencing physical and mental exhaustion, which can be a major worry during menopause. Women's quality of life can be significantly impacted by these symptoms, which can also cause feelings of fatigue at work.

The results of this study are in line with research conducted in Italy by **Converso et al. (2019)**, which showed how menopausal symptoms had a noticeable impact on depersonalization and emotional weariness. Also, the results are consistent with a study conducted in Italy by **Viotti et al. (2021)**, which found that the indirect impact of work competence on the relationship between job demands and fatigue was only significant when menopausal symptoms were severe. Mild symptoms did not significantly affect its effect. Researcher point of view: mild symptoms are less disruptive to daily functioning. Women are often able to maintain concentration, sleep

quality, and emotional balance but contradiction to severe symptoms.

Conclusions:

-The study concludes that occupational depersonalization and emotional weariness are common among the nurses under investigation. Furthermore, a statistically significant positive regression was observed between menopausal symptoms and emotional tiredness, depersonalization, and personal achievement. These findings answer the third research question. While for the first research question, majority of the studied nurses had depersonalization with most of them had low personal accomplishment and high emotional exhaustion. For the second research question, more than half of the studied participants experienced moderate menopausal symptoms.

Recommendations

-Health education programs related to identification and management of job burnout should be developed for menopausal nurses and other health care workers.

-More cooperation and mentoring to help menopausal nurses who are burned out.

-Recognize the significance of Postmenopausal healthcare burnout professionals and promote candid dialogue and a positive work atmosphere.

-Improving menopausal women's physical workload, alleviating cognitive job-related discomfort, and ensuring equitable work distribution.

-More awareness of menopause in the workplace is needed, alongside adequate treatment.

-Fair job allocation and a healthy work-life balance are important protective factors.

-Stress management and assertiveness training should be provided to all menopausal women in order to reduce psychological problems and enhance coping strategies in the workplace.

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