

Menopause in the Workplace: Symptoms, Coping Strategies, and Workplace Support Among Working Women in the West Bank, Palestine

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Abstract

Background

Menopause is characterized by physical, psychological, and urogenital symptoms which can negatively impact the quality of life of women and their functioning in the workplace. However, there is scant literature on the menopausal experience, coping methods, workplace and sociocultural perceptions among women employees in Palestine.

Objectives

of this study were to investigate the menopausal symptoms, coping mechanisms and workplace and sociocultural perceptions of Palestinian women employees and to determine the relationship between menopausal symptoms and selected demographic, socioeconomic, occupational, and health factors.

Methods

The present study is a cross-sectional, quantitative study carried out on 393 employed women aged 45–60 years old living in the regions of Hebron, Ramallah, and Tulkarm in the West Bank. Women from various sectors, including educational, healthcare, governmental, private, and others were selected. Data were gathered through structured questionnaires evaluating demographics and health status, menopausal symptoms, coping strategies, workplace, and sociocultural perceptions. Data analysis involved use of descriptive statistics, independent-samples t-tests, one-way analysis of variance, Pearson's correlation, and multiple linear regression. The significance level was set at $p < 0.05$.

Results

The mean age of participants is 51.25 ± 4.62 years old. The overall severity of menopausal symptoms was found to be moderate (mean = 2.94 ± 0.72). Joint or muscle pain is the most common symptom followed by fatigue, anxiety, and changes in mood. The severity of menopausal symptoms is significantly related to employment status ($p = .007$), years of experience ($p = .028$), economic situation ($p = .039$), and presence of chronic disease ($p = .001$). Moreover, coping strategies are significantly associated with employment status ($p = .001$), work location ($p = .035$), monthly income ($p = .005$), and income sufficiency ($p = .007$). Perceived support in the workplace was reported as low, as 49.4% of participants disagreed or strongly disagreed that their workplaces were supportive in managing menopausal symptoms and 50.8% of participants expressed disagreement or strong disagreement in relation to workplace accommodation for menopausal symptoms. Additionally, 34.6% of participants agreed or strongly agreed that menopause is stigmatized in the workplace. Employment status, coping strategies,

and monthly income were significant predictors of menopausal symptoms. Cultural adaptation, monthly income, and menopausal symptoms are significant predictors of coping strategies.

Conclusion

Women workers in the West Bank suffer from a heavy burden of menopausal symptoms, lack of support at the workplace, and social-cultural stigmatization. It seems that socioeconomic and occupational determinants affect both the severity of symptoms and coping. Menopause-related education, psychosocial support, and flexible work conditions can be helpful for improving the situation of Palestinian menopausal women.

Introduction

Menopause is a natural biological process that women undergo, occurring when they are aged between 45 to 55 years old, and it entails the permanent ending of the menses owing to the cessation of ovarian follicular function[1]. Menopause is usually divided into three phases: pre-menopause phase, where women have regular menses; perimenopause phase, whereby the menses are irregular and hormones fluctuate until the woman stops having menses; and post-menopause phase, which is characterized by the cessation of menses for at least 12 months[2].

The menopause symptoms start about four years prior to the last menstruation, lasting between four and eight years, although the number of years that symptoms last can vary depending on individual women[3]. The symptoms may be hot flashes, sweating, mood changes, insomnia, vaginal dryness, bone pain, and problems with cognition, such as forgetfulness and difficulty recalling things[3, 4]. Such symptoms may have serious implications on the health, psychological, and occupational functioning of women.

Physiological and hormonal changes associated with menopause are associated with many kinds of problems related to the physical, psychological, and social spheres⁶. In spite of the serious influence that these problems have on people's quality of life, they are not often recognized and treated in healthcare organizations. According to [5], around 10% of women quit their jobs due to menopausal symptoms, while 77% suffer from at least one problematic symptom.

Women make up a large number of the world's working population, and because of the increase in life expectancy and the higher ages of retirement, more women are going through menopause and yet continue to be employed[6]. As such, menopause is increasingly becoming a health concern at the place of work[7]. Issues like fatigue, hot flushes, mood alterations, sleeping problems, and cognitive problems could affect job performance and productivity[8].

With the increasing numbers of women experiencing menopause in the labor market, it becomes crucial to develop workplace policies that consider menopause issues and give proper support[7]. Coping

mechanisms such as managing stress, social support, work flexibility, and workplace accommodations can play a key role in mitigating the negative impacts of menopausal symptoms at work[8]. Some more ways of supporting menopausal women in the workplace include developing good workplace infrastructure, raising awareness of menopause among the managers and staff of an organization, health education, and work flexibility[9].

Along with the symptoms experienced during menopause, the presence of other disorders such as osteoporosis and cardiovascular disease might affect a woman's ability to perform her duties[10]. Women often feel that there is no adequate support from their employers as only around 30% perceive that their employers recognize their issues related to menopause[11]. Stigmas and stereotypes about menopause contribute to workplace discrimination and decreased job satisfaction, affecting women's overall employment experience[12, 13].

In Palestine, there is substantial evidence that shows that menopausal women have a lot of physical and psychological difficulties that negatively impact their quality of life[14]. Hence, enhancing the health education, preventative care, work environment, and social support is crucial. In addition, socio-economic and cultural determinants can also play a role in the experiences of menopausal women. The proportion of female labor force participation in the West Bank and Gaza is relatively lower (18.89%) compared to the international labor force participation rate (48.7%)[15, 16]. Even though the rate of participation is relatively lower than the international participation rate, many working women in Palestine have jobs that do not provide any workplace flexibility and menopause support[13].

Prior research involving Palestinians has demonstrated that women employ various coping techniques during menopause. Effective coping includes emotional regulation, learning lessons from past experiences, and managing daily activities[17]. Nevertheless, there are some women who resort to ineffective coping techniques such as extensive use of analgesics, isolation from personal goals, and negative body images linked to aging, which might negatively impact their psychological functioning[18].

Purpose of the Study

The study was conducted in order to investigate menopausal symptoms, coping Strategies, and sociocultural perceptions amongst working women in the West Bank, Palestine. The study intended to look at the association between severity of menopausal symptoms and selected demographic, socioeconomic and health-related factors.

More specifically, the study intended to:

1. Measure the severity of menopausal symptoms in the three stages of menopause namely premenopausal, perimenopausal and postmenopausal stages.
2. Determine the coping Strategies and sociocultural perceptions regarding menopause within the workplace.

3. Investigate the association between demographic variables, socioeconomic status, health status and severity of menopausal symptoms among working women in Palestine.

Research Hypotheses

It is expected that menopausal symptom severity will be significantly higher amongst women in perimenopausal and postmenopausal stages compared to premenopausal stage women, and there will be significant associations between socioeconomic factors, workplace environment and coping Strategies and menopausal symptom severity.

Methods

Design, Sample, and Setting

A cross-sectional quantitative study design was used in this study. Palestinian working women in the West Bank were recruited for the study. Inclusion criteria were: menopausal women aged 45 to 60 years, women working full-time, and self-employed women. The exclusion criteria were women with iatrogenic menopause (induced menopause), bilateral oophorectomy, ovarian ablation, women who use hormone replacement therapy, and women with premature primary/ovarian failure, and amenorrhea < 40 years.

Data was collected from three cities: Hebron (South), Ramallah (Middle), and Tulkarm (North). Recruitment of participants was conducted at various sites and organizations, including schools, universities, hospitals, primary healthcare settings, and diverse private and governmental companies. The sample size was proportionate according to the number of women in each province.

Instrument

To collect detailed information on the experiences of menopausal women at work, the study primarily used a structured questionnaire compiled from existing literature. The questionnaire consisted of the following sections:

Demographic Information

This section collected data on participants' age, marital status, education, employment status, years of experience in current job, type of work (e.g., professional/administrative, physical/manual), monthly income, financial status, household responsibilities, the presence of chronic diseases, and sources of information about menopause. Additional questions addressed family dynamics.

Menopausal Symptoms and their Impact at Work

This tool included 13 items that respondents answered on a 5-point Likert scale from "Never" (1) to "Always" (5) to score the frequency of particular menopausal symptoms (e.g., hot flashes, exhaustion, memory loss, mood swings) and how these affect their ability to do their jobs. This study's instrument for measuring menopausal symptoms is valid (Cronbach's alpha = 0.85) and reliable (test-retest reliability = 0.90), in line with previous research that emphasizes the usefulness of standardized measures in evaluating menopausal experiences across different groups[3, 14, 19]. The impact of menopausal symptoms on work is categorized as follows: Low Impact: 1.0–2.0 (indicating symptoms rarely or never affect work), Moderate Impact: 2.1–3.5 (indicating occasional or mild symptoms), and High Impact: 3.6–5.0 (indicating frequent or severe symptoms).

Coping Strategies at Work

This tool included 10 items to score coping strategies at the workplace that range on a 5-point Likert scale from "Never" (1) to "Always" (5). The tool includes taking breaks, seeking support from colleagues, and using relaxation techniques. Statements are further categorized by assessing perceptions of control, job challenges, and occupational achievements. The tool is valid and reliable, with Cronbach's alpha ranging from 0.80 to 0.88[8, 19].

Workplace and Cultural Perceptions

This tool has four questions that focus on workplace accommodations, cultural beliefs about menopause, and perceived stigma. It is a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The tools were used to measure perception around menopause in the workplace and cultural perceptions[20]. The efficacy of these instruments in capturing the interaction between menopausal difficulties and workplace culture has been thoroughly assessed, offering important information for creating specialized assistance plans. The reliability of the instruments is confirmed by a Cronbach's alpha of 0.85, and their validity has been demonstrated through content validity and expert review[20].

The total scores of the menopausal symptoms and the coping strategies scales were categorized into three categories: low (1.0–2.0), moderate (2.1–3.5), and high (3.6–5.0)[3, 19].

Data Collection

The questionnaire takes about 10 minutes to complete. Only authorized researchers had access to the encrypted and securely stored responses. All records were stored in safe, password-protected systems, and data was anonymized to avoid participant identity. After five years of the study, the data will be deleted.

Data Analysis

Data entry, coding, cleaning, and analysis was done using Statistical Package for Social Sciences (SPSS) software version 27. Data was described using descriptive statistics regarding demographic, occupational, and menopause features of the participants. Means and SD were used for continuous data while frequency and percentage were used for categorical data. Mean scores were determined for menopausal symptoms, coping strategies, and workplace perception scale. Severity of menopausal symptoms was classified using predetermined cut off points as low (1.00–2.00), moderate (2.10–3.50), and high (3.60-5.00).

Before conducting inferential analyses, assumptions such as normality, homogeneity of variances, and multicollinearity were tested. Normality was tested using the Kolmogorov-Smirnov test and the Shapiro-Wilk test, as well as by inspecting Q-Q plots and histograms. An independent-samples t-test was employed for comparing mean scores for menopausal symptoms and coping skills between two groups of variables. On the other hand, a one-way ANOVA was applied for comparing means for variables that had three or more groups. The Pearson's product-moment correlation coefficient was used for testing correlations between menopausal symptoms, coping skills, workplace support, age, and work experience.

Multiple linear regression was conducted to determine the independent predictors of menopausal symptoms and coping behaviors. In the first multiple linear regression, the dependent variable was menopausal symptoms, while age, education, employment, working experience, income, coping behavior, and workplace culture were used as the predictors. The second regression was conducted on coping behavior as the dependent variable and age, education, income, workplace culture, and menopausal symptom score as the predictors. The adequacy of each of the models was established using measures such as the coefficient of determination (R^2), adjusted R^2 , standard beta coefficients (β), F-statistics, and Variance Inflation Factor (VIF). All tests were two-tailed and p-values below 0.05 were statistically significant.

Result

Demographic Variables of Participant (N = 393)

As shown in Table 1, participants' ages ranged from 45 to 60 years with a mean of 51.25 (SD = 4.62). The highest representation was from Hebron (180 participants, 45.8%), followed by Ramallah (124, 31.6%) and Tulkarm (89, 22.6%). The majority of participants lived in villages (201, 51.1%), with others residing in cities (160, 40.7%) or refugee camps (32, 8.1%). Most participants were married (309, 78.6%), and the largest education group had bachelor's degrees (189, 48.1%), followed by diploma holders (93, 23.7%).

Regarding employment (Table 2), 346 women (88.0%) were employed full-time, and most worked in the government sector (196, 49.9%) or education (131, 33.3%). Monthly income varied: 245 women (62.3%) earned more than 3000 NIS, while 99 (25.2%) earned between 1800–3000 NIS, and 49 (12.5%) earned less than 1800 NIS. However, 214 participants (54.5%) reported that their income was not enough to

meet life needs. Most women lived with their nuclear families (281, 71.5%) and shared breadwinner responsibilities with their spouses (267, 67.9%).

Table 1
Demographic Variables of Participant (N = 393)

Variable	Category	N	%
Age	Mean $\pm$ S.D (51.25 $\pm$ 4.62)		
	Range: Min-Max (45–60)		
Governorate	Ramallah	124	31.6%
	Tulkarm	89	22.6%
	Hebron	180	45.8%
Place of Residence	City	160	40.7%
	Village	201	51.1%
	Refugee camp	32	8.1%
Marital Status	Single	31	7.9%
	Married	309	78.6%
	Divorced	20	5.1%
	Widowed	33	8.4%
Education Level	Primary	23	5.9%
	Secondary	35	8.9%
	Diploma	93	23.7%
	Bachelor	189	48.1%
	Postgraduate	53	13.5%

Table 2
Employment Status and Economic Situation information (N = 393)

Variable	Category	N	%
Employment Status	Full-time	346	88.0%
	Self-employed	47	12.0%
Years of Experience in Current Job	Less than or equal 10 years	62	15.8%
	11–20	126	32.1%
	21–30	171	43.5%
	More than 30 years	34	8.7%
Sector of Employment	Government	196	49.9%
	Private Sector	133	33.8%
	NGO	36	9.2%
	Other	28	7.1%
Work Location	Professional/Administrative	82	20.9%
	Physical/Manual Labor	25	6.4%
	Service/Customer-Facing	25	6.4%
	Education	131	33.3%
	Healthcare	99	25.2%
	Private sectors	23	5.9%
	Other	8	2.0%
Monthly Income	< 1800 NIS	49	12.5%
	1800–3000 NIS	99	25.2%
	> 3000 NIS	245	62.3%
Economic Situation	Enough	179	45.5%
	Not enough	214	54.5%
Sufficiency of monthly income	Yes	67	17.0%
	Kind of	158	40.2%
	Not sufficient	168	42.7%
Hours of household responsibilities	< 2 hours	20	5.1%
	2–4 hours	143	36.4%

Variable	Category	N	%
	> 4 hours	230	58.5%
Living status	Alone	22	5.6%
	With spouse/partner only	54	13.7%
	With nuclear family	281	71.5%
	With extended family	36	9.2%
Family Breadwinner	Me and my husband	267	67.9%
	My husband	17	4.3%
	Another person	14	3.6%
	Me only	95	24.2%

Table 3 shows that 175 women (44.5%) were postmenopausal, 115 (29.3%) were premenopausal, and 103 (26.2%) were perimenopausal. The mean age at menstrual cessation was 49.2 years (SD = 3.04). Chronic disease was reported by 168 participants (42.7%), most commonly hypertension (79, 47.0% of those with chronic illness) and diabetes mellitus (59, 35.1%). The main sources of information about menopause were health service providers (205, 52.2%), friends/family (168, 42.7%), the internet (161, 41.0%), social media (113, 28.8%), and traditional media (71, 18.1%).

Table 3
Menopausal Information and Medical Status (N = 393)

Variable	Category	N	%
Information about Menopause	Very good	157	39.9%
	Medium	105	26.7%
	I know some information	96	24.4%
	Not good	35	8.9%
Sources of information about menopause:			
	TV and other media	71	18.1%
	Social media	113	28.8%
	Friends and Family	168	42.7%
	Health service provider	205	52.2%
	Internet	161	41.0%
Menstrual status (Period in the last 12 months)	Premenopause (Regular Menstrual Cycle)	115	29.3%
	Perimenopause (Change in cycle, or interruption of less than 12 months)	103	26.2%
	Postmenopause (Interruption of the menstrual cycle 12 months or more)	175	44.5%
Age when menstrual cycle stopped:			
Mean $\pm$ S.D (49.2 $\pm$ 3.04)			
Range: Min-Max (40–56)			
Medical status:			
Chronic Disease	Yes	168	42.7%
	No	225	57.3%
Types of Chronic Disease	Diabetes mellitus	59	35.1%
	Hypertension	79	47.0%
	Dyslipidemia	34	20.2%
	Others	44	26.2%
Years of being diagnosed with a chronic disease:			
Mean $\pm$ S.D (11.56 $\pm$ 11.65)			
Range: Min-Max (1–58)			

Mean and Standard Deviation for Menopausal Symptoms (N = 393)

As illustrated in Table 4, menopausal symptoms were rated at moderate severity overall (mean = 2.94, SD = 0.72). Joint or muscle pain was the most prevalent symptom (mean = 3.74), followed by fatigue (mean = 3.53), mood swings (mean = 3.21), and anxiety (mean = 3.26). Sleep disturbances, bloating, and difficulty concentrating were also common. Urogenital symptoms such as vaginal dryness (mean = 2.4) and urinary bladder problems (mean = 2.31) were rated lowest, though still in the moderate range. Somatic symptoms were more prominent than psychological or urogenital symptoms, especially among perimenopausal and postmenopausal women.

Table 4
Mean and Standard Deviation for Menopausal Symptoms (N = 393)

	Premenopause N = 115	Perimenopause N = 103	Postmenopause N = 175	Total N = 393	Level
	Mean ± S.D	Mean ± S.D	Mean ± S.D	Mean ± S.D	
1. Hot flashes	2.38 ± 1.36	3.32 ± 1.08	3.1 ± 1.28	2.95 ± 1.31	Moderate
2. Fatigue	3.28 ± 1.21	3.76 ± 0.91	3.57 ± 0.99	3.53 ± 1.05	Moderate
3. Joint or muscle pain	3.43 ± 1.17	3.79 ± 1.1	3.91 ± 1.12	3.74 ± 1.15	High
4. Sleep disturbances	2.9 ± 1.17	3.35 ± 1.32	3.19 ± 1.24	3.15 ± 1.25	Moderate
5. Headaches or migraines	2.58 ± 1.26	3.12 ± 1.22	2.67 ± 1.22	2.76 ± 1.25	Moderate
6. Palpitations	2.28 ± 1.18	2.65 ± 1.05	2.42 ± 1.08	2.44 ± 1.11	Moderate
7. My stomach is always bloated and I gained weight.	2.97 ± 1.49	3.3 ± 1.27	2.94 ± 1.23	3.05 ± 1.33	Moderate
Total score of somatic symptoms	2.83 ± 0.86	3.33 ± 0.69	3.12 ± 0.66	3.09 ± 0.75	Moderate
8. Difficulty concentrating	2.8 ± 1.22	3.12 ± 1.03	3.09 ± 1.07	3.01 ± 1.11	Moderate
9. Mood swings	3.17 ± 1.22	3.46 ± 1.12	3.1 ± 1.16	3.21 ± 1.17	Moderate
10. Anxiety	3.1 ± 1.25	3.42 ± 1.13	3.27 ± 1.12	3.26 ± 1.17	Moderate
Total score of psychological symptoms	3.02 ± 1.03	3.33 ± 0.92	3.15 ± 0.87	3.16 ± 0.93	Moderate
11. Urinary bladder problems (difficulty in urination, increased need for urination, urinary incontinence)	2.12 ± 1.16	2.51 ± 1.19	2.32 ± 1.14	2.31 ± 1.17	Moderate
12. My vagina feels dry.	2.15 ± 1.16	2.63 ± 1.07	2.44 ± 1.28	2.4 ± 1.2	Moderate

	Premenopause N = 115	Perimenopause N = 103	Postmenopause N = 175	Total N = 393	Level
	Mean ± S.D	Mean ± S.D	Mean ± S.D	Mean ± S.D	
13. I feel I have a vaginal infection.	2.29 ± 1.28	2.81 ± 1.09	2.37 ± 1.15	2.46 ± 1.19	Moderate
Total score of urogenital symptoms	2.19 ± 1.02	2.65 ± 0.9	2.38 ± 1	2.39 ± 0.99	Moderate
Total score of menopausal symptoms	2.73 ± 0.82	3.17 ± 0.66	2.95 ± 0.64	2.94 ± 0.72	Moderate

Cut of point for menopausal Symptoms (Low = 1.00–2.00, Moderate = 2.1–3.5, High = 3.6-5.00)

The data in the Fig. 1 illustrates the occurrence of some menopausal symptoms among three menstrual status groups: premenopausal, perimenopausal, and postmenopausal women. The results clearly show that most of the symptoms worsen as women progress from premenopausal to postmenopausal. Hot flashes, for example, are felt by 65.2% of premenopausal women, rising significantly to 93.2% during perimenopause and remaining high at 85.7% during postmenopausal. This pattern emphasizes the strong association of vasomotor symptoms with hormonal change, particularly in the menopausal transition phase. The other common symptom is fatigue, which affects 87.8% of women in the premenopausal period and increases to 98.1% in perimenopause, decreasing slightly but still high in postmenopausal (96.6%). Similarly, joint or muscle pain is also reported in all of them, with over 92% of premenopausal women included, rising to over 97% during perimenopause and remaining the same postmenopausal, which may be the musculoskeletal manifestations of decreasing estrogen levels.

Sleep difficulties also show a tangible rise, from 82.6% in premenopausal to 90.9% in postmenopausal women, suggesting that hormonal status affects quality of sleep. Headache and migraine are most prevalent in perimenopause (91.3%) and fall slightly after menopause (78.9%), depicting the unstable pattern of estrogen during the transition. Irritability or mood swings also follow the same pattern, increasing significantly from 84.4% in premenopausal to 95.1% in perimenopause and continuing to stay high (94.3%) after menopause. One of the most significant increases is in the symptom of pain or vaginal dryness, which only 54.8% of premenopausal women experience but increases to over 93% in perimenopausal and postmenopausal groups, respectively, demonstrating its close association with estrogen deficiency and its impact on vaginal tissues. Lastly, low libido is characteristic of all phases but increases from 80% in premenopausal women to over 91% in postmenopausal women. From the evidence presented, although the majority of the symptoms begin during the premenopausal phase, they are significantly compounded during perimenopause and have the tendency to persist through

postmenopausal. Overall, the line graph illustrates the cumulative effect of menopause symptoms coupled with the radical physiological and psychological changes that women experience during the menopause transition, as seen in Fig. 1.

Frequency and Percentage of Coping Strategy.

Table 5 outlines the use of coping strategies. The most common behaviors included taking short breaks to manage stress (152 participants, 38.7% sometimes; 63, 16% often), maintaining a healthy diet and hydration (130, 33.1% sometimes; 91, 23.2% often), and practicing relaxation techniques (132, 33.6% sometimes). Fewer participants frequently sought support from colleagues (30, 7.6% always) or discussed symptoms with supervisors (35, 8.9% always). Only 76 women (19.3%) always used over-the-counter medications. Overall, coping strategies were used at a moderate level, with substantial variation depending on type.

Table 5
Frequency and Percentage of Coping Strategy

Item	Never		Rarely		Sometimes		Often		Always	
	N	%	N	%	n	%	N	%	n	%
1. Taking short breaks to manage stress	67	17	69	17.6	152	38.7	63	16	42	1.7
2. Seeking support from colleagues	125	31.8	79	20.1	103	26.2	56	14.2	30	7.6
3. Adjusting workload based on how I'm feeling	102	26	92	23.4	122	31	51	13	26	6.6
4. Using relaxation techniques (e.g., deep breathing)	72	18.3	76	19.3	132	33.6	59	15	54	15
5. Discussing symptoms with a supervisor for adjustments	146	37.2	95	24.2	67	17	50	12.7	35	8.9
6. Using over-the-counter medications	117	29.8	76	19.3	96	24.4	28	7.1	76	19.3
7. Maintaining a healthy diet and staying hydrated	45	11.5	54	13.7	130	33.1	91	23.2	73	18.6
8. Engaging in physical exercise	97	24.7	85	21.6	130	33.1	46	11.7	35	8.9
9. I can control things in my life that are important to me	10	2.5	37	9.4	101	25.7	142	36.1	103	26.2
10. I feel challenged in my work	31	7.9	50	12.7	120	30.5	93	23.7	99	25.2

Women’s workplace and sociocultural perceptions.

Table 6 presents perceptions of workplace and cultural support. Regarding workplace support, 86 women (21.9%) strongly disagreed and 108 (27.5%) disagreed that their workplace was supportive. Only 57 (14.5%) agreed and 18 (4.6%) strongly agreed. Regarding workplace accommodations, 122 (31.0%) disagreed and 78 (19.8%) strongly disagreed that they were provided with adjustments. Regarding stigma, 112 participants (28.5%) agreed and 24 (6.1%) strongly agreed that menopause is stigmatized in the workplace. Cultural beliefs were perceived to influence menopausal experience by 100 women (25.4%) who agreed and 31 (7.9%) who strongly agreed.

Table 6
Frequencies and percentages of women's workplace and sociocultural perceptions.

Question	Answer	n	%
How supportive do you feel your workplace is in managing menopausal symptoms?	Strongly Disagree	86	21.9%
	Disagree	108	27.5%
	Neutral	124	31.6%
	Agree	57	14.5%
	Strongly Agree	18	4.6%
Does your employer provide accommodations (e.g., flexible hours, cooler workspace)?	Strongly Disagree	78	19.8%
	Disagree	122	31.0%
	Neutral	97	24.7%
	Agree	88	22.4%
	Strongly Agree	8	2.0%
Do you feel menopause is a stigmatized topic in your workplace?	Strongly Disagree	47	12.0%
	Disagree	93	23.7%
	Neutral	117	29.8%
	Agree	112	28.5%
	Strongly Agree	24	6.1%
Do cultural beliefs in your community influence your experience of menopause?	Strongly Disagree	37	9.4%
	Disagree	113	28.8%
	Neutral	112	28.5%
	Agree	100	25.4%
	Strongly Agree	31	7.9%

Cut off point for menopausal Symptoms (Low = 1.00–2.00, Moderate = 2.1–3.5, High = 3.6-5.00)

Relationship between Demographic Variables and Menopausal Symptoms and coping Strategy.

Independent-sample t-tests and one-way ANOVA were conducted to assess relationships between demographic characteristics and both menopausal symptoms and coping strategies.

Table 7 reveals that menopausal symptoms significantly differed by employment status ($p = .007$), with self-employed women reporting higher symptoms. Years of experience also affected symptoms ($p = .028$), with those having 21–30 years reporting lower symptoms. Women reporting their income as "not enough" had higher symptom scores ($p = .039$), as did those with chronic disease ($p = .001$). Those who relied on family/friends ($p = .005$) or the internet ($p = .001$) for menopause information had higher symptoms.

Table 8 shows significant differences in coping scores based on employment status ($p = .001$), work location ($p = .035$), monthly income ($p = .005$), and sufficiency of income ($p = .007$). Women with full-time jobs and higher income demonstrated greater use of coping strategies. Medical status showed a marginal relationship with coping ($p = .07$), suggesting that women with chronic illness may use fewer coping strategies.

Table 7
Relationship between Demographic Variables and Menopausal Symptoms.

Variable	Category	N	Mean $\pm$ S.D	p-value
Employment Status	Full-time	346	2.91 $\pm$ 0.71	0.007**
	Self-employed	47	3.21 $\pm$ 0.70	
Years of Experience in Current Job	Less than or equal 10 years	62	3.09 $\pm$ 0.75	0.028**
	11–20	126	3.02 $\pm$ 0.69	
	21–30	171	2.82 $\pm$ 0.72	
	More than 30 years	34	3.00 $\pm$ 0.68	
Economic Situation	Enough	179	2.86 $\pm$ 0.67	0.039**
	Not enough	214	3.01 $\pm$ 0.75	
Medical status (Chronic Disease)	Yes	168	3.09 $\pm$ 0.70	0.001**
	No	225	2.84 $\pm$ 0.72	
Sources of information about menopause	TV and other media	71	2.96 $\pm$ 0.63	0.796
	Social media	113	2.94 $\pm$ 0.65	0.905
	Friends and Family	168	3.06 $\pm$ 0.73	0.005**
	Health service provider	205	2.94 $\pm$ 0.69	0.843
	Internet	161	3.08 $\pm$ 0.68	0.001**
Types of Chronic Disease	Diabetes mellitus	59	3.2 $\pm$ 0.7	0.124
	Hypertension	79	3.12 $\pm$ 0.71	0.534
	Dyslipidemia	34	3.29 $\pm$ 0.62	0.042**

Variable	Category	N	Mean $\pm$ S.D	p-value
	Others	44	3.03 $\pm$ 0.68	0.535

Table 8
Relationship between Demographic Variables and Coping Strategy

Variable	Category	N	Mean $\pm$ S.D	p-value
Employment Status	Full-time	346	2.90 $\pm$ 0.588	0.001*
	Self-employed	47	2.59 $\pm$ 0.520	
Work Location	Professional/Administrative	82	2.95 $\pm$ 0.64	0.035*
	Physical/Manual Labor	25	2.62 $\pm$ 0.60	
	Service/Customer-Facing	25	2.87 $\pm$ 0.62	
	Education	131	2.88 $\pm$ 0.54	
	Healthcare	99	2.92 $\pm$ 0.56	
	Private sectors	23	2.56 $\pm$ 0.65	
	Other	8	2.86 $\pm$ 0.58	
Monthly Income	< 1800 NIS	49	2.67 $\pm$ 0.50	0.005*
	1800–3000 NIS	99	2.79 $\pm$ 0.59	
	> 3000 NIS	245	2.94 $\pm$ 0.59	
Economic Situation	Enough	179	2.97 $\pm$ 0.58	0.001**
	Not enough	214	2.78 $\pm$ 0.57	
Sufficiency of monthly income	Yes	67	3.05 $\pm$ 0.62	0.007*
	Kind of	158	2.88 $\pm$ 0.57	
	Not sufficient	168	2.78 $\pm$ 0.57	
Medical status (Chronic Disease)	Yes	168	2.80 $\pm$ 0.56	0.07
	No	225	2.91 $\pm$.060	

Correlation between Study Variables

Table 9 presents Pearson's correlation coefficients. Coping strategies were positively correlated with workplace support ($r = .042, p < .05$), meaning that perceived workplace support is associated with more frequent use of coping strategies. A weak but significant correlation existed between menopausal symptoms and coping ($r = .05, p < .05$). Workplace support was also positively correlated with age ($r =$

.016, $p < .05$) and years of experience ($r = .000$, $p < .01$), suggesting that older, more experienced women may perceive greater support at work.

Table 9
Pearson Correlation between Study Variables

Variable	1	2	3	4	5	M	SD
1. Coping Strategies	—	0.05*	0.042*	0.324	0.991	2.86	0.59
2. Menopausal Symptoms	0.05*	—	0.177	0.556	0.097	2.94	0.71
3. Workplace Support	0.042*	0.177	—	0.016*	0.000*	2.73	.069
4. Age	0.324	0.556	0.016*	—	0.000*	51.25	4.62
5. Years of Experience	0.991	0.097	0.000*	0.000*	—	20.53	4.62

Multiple Regression Analysis Predicting Menopausal Symptoms and Coping Strategy

Two multiple linear regression models were conducted to examine the psychosocial and demographic predictors of menopausal symptoms and coping strategy among women. The first model assessed the extent to which age, education level, employment status, years of experience in the current job, monthly income, total coping, and cultural adaptation predict the severity of menopausal symptoms. The model was statistically significant, $F(7, 385) = 2.786$, $p = .008$, though it accounted for a modest proportion of the variance ($R^2 = .048$, Adjusted $R^2 = .031$), suggesting that only 4.8% of the variability in menopausal symptoms was explained by the included variables, as seen in the Table 10.

Among the predictors, employment status ($\beta = .163$, $p = .005$), coping strategy ($\beta = -.100$, $p = .050$), and monthly income ($\beta = .170$, $p = .013$) were found to be statistically significant. Surprisingly, higher income and being employed were both associated with increased reporting of menopausal symptoms. This counterintuitive finding might reflect the added stress or expectations experienced by working women or those in higher socioeconomic positions, which could exacerbate symptom perception or severity. Conversely, women who reported higher levels of coping skills experienced fewer symptoms, emphasizing the protective effect of effective coping during the menopausal transition. Other variables, including age, education level, years of experience, and cultural adaptation, were not significant predictors.

The second regression model investigated predictors of coping strategy in menopausal women, using age, education level, monthly income, cultural adaptation, and menopausal symptoms as predictors. This model was also statistically significant, $F(5, 387) = 4.268$, $p = .001$, and explained slightly more variance than the first model ($R^2 = .052$, Adjusted $R^2 = .040$). Significant predictors included cultural adaptation ($\beta = .115$, $p = .022$), monthly income ($\beta = .165$, $p = .004$), and menopausal symptoms ($\beta = -.108$, $p = .031$). Women who reported higher cultural adaptation and higher income tended to have better coping abilities, suggesting that socioeconomic and cultural integration factors support psychological resilience

during menopause. In contrast, experiencing more menopausal symptoms was associated with poorer coping, highlighting the bidirectional relationship between symptom burden and the ability to manage stress. Age and education level did not significantly contribute to coping outcomes in this model, as seen in the Table 11.

Multicollinearity was assessed using Variance Inflation Factor (VIF) values, all of which were well below the commonly accepted cutoff of 10. The VIFs ranged between 1.024 and 1.888, indicating that multicollinearity was not a concern and that each predictor's contribution to the model is distinct and statistically stable.

Normality testing using the Kolmogorov-Smirnov and Shapiro-Wilk tests indicated slight deviations from a normal distribution of residuals ($p < .05$); however, inspection of the Q-Q plots showed that residuals were approximately normally distributed. Given the large sample size ($n = 393$), the models can be considered robust, and these minor violations of normality are unlikely to substantially affect the validity of the regression results.

Table 10
Multiple Regression Analysis Predicting Menopausal Symptoms

Predictor	B	β (Beta)	P
Constant	2.530	-----	0.000
Age	0.001	0.006	0.921
Education Level	-0.029	-0.042	0.486
Employment Status	0.361	0.163	0.005
Years of Experience (Current Job)	-0.009	-0.113	0.067
Coping Strategies Score	-1.22	-1.00	0.05
Monthly income	0.173	0.170	0.013
Workplace cultural Expectation	0.067	0.064	0.211

Table 11
Multiple Regression Analysis Predicting Coping Strategy

Predictor	B	β (Beta)	P
Constant	2.754	-----	0.000
Age	-0.005	-0.040	0.433
Workplace cultural	0.009	0.115	0.02
Monthly Income	0.137	0.165	0.004
Menopausal Symptoms	-0.088	-0.108	0.031
Education	0.006	0.01	0.860

Discussion

The findings of this study show significant symptom severity and coping differences across employment status, economic conditions, and sociocultural perceptions. Further, the study brings to light the historical stigma associated with menopause in the workplace that precludes open conversation and delivery of care for the women in question.

More than two thirds (69.7%) of employed Palestinian women experience menopausal symptoms. Among them, 19.1% experience a high prevalence of symptoms, whereas only 11.2% have low symptom prevalence. Somatic symptoms were the most prevalent (58%), followed by psychological symptoms (46.3%) and urogenital symptoms (42.5%). These findings highlight that while the majority of the women experience visible symptoms, the intensity and type of the symptoms vary, with physical discomfort being the most complained about.

Musculoskeletal pain was the most severe symptom identified in this study, with a mean percentage of 74.8%, as observed in international studies where musculoskeletal symptoms were among the most frequent menopausal symptoms[2, 14]. This is largely due to the hormonal and physiological shift that occurs during menopause, particularly in the decline in estrogen levels that may have negative impacts on joint and muscle functioning, decreased collagen formation, and increased vulnerability to inflammation[1]. These findings reiterate the importance of providing specialized care to enable women to manage such symptoms, especially in the work setting.

Psychological symptoms were the second most common cluster reported by participants. Interestingly, 46.3% of the women reported moderate levels of psychological symptoms, and 38.2% reported high levels. Such results were, however, different from those found in studies conducted within Palestine[14]. This may be due to the characteristics of the sample of the current study (i.e., working women), who may be exposed to more physical stress or work-related stressors that maximize somatic symptoms such as fatigue and musculoskeletal pain.

Our findings confirmed that perimenopausal women endorsed higher severity of symptoms across all three domains—physical, psychological, and urogenital—compared to premenopausal and postmenopausal women. This was also evidenced by [21], where they recruited midlife women and recorded significantly higher perimenopausal group severity scores for physical symptoms, psychological symptoms, and urogenital symptoms.

Though urogenital symptoms were less severe in general, their presence mattered, especially for perimenopausal and postmenopausal women. Specifically, 31.6% of perimenopausal and 43.9% of postmenopausal women reported high severity of urogenital symptoms compared with 24.6% for premenopausal women, with a p-value of 0.019. This consistent evidence reported by [22], shows that prolonged estrogen deficiency contributes to symptoms such as vaginal dryness and urinary disorders.

The most commonly used coping strategies were "controlling important aspects of life". This trend suggests a shift towards self-management over organizational support, possibly due to work stigma[23]. It depicts a reliance on personal agency more than institutional organizational accommodations. Interventions such as short breaks and relaxation techniques were preferred. Women are non-obtrusive and can be easily integrated into the work environment, allowing them to cope with symptoms discreetly²⁶. Interestingly, perimenopausal women reported that they used more coping strategies than premenopausal women, suggesting that symptom severity at this phase might require more adjustment. Nevertheless, the non-significant utilization of talking with supervisors is consistent with global studies that have determined a general reluctance to talk about menopause in the workplace[24]. This also highlights the need for policy and education changes in the workplace to normalize menopause conversations and reduce associated stigma. This can facilitate a culture where women feel empowered and can ask for accommodations to support well-being and productivity during menopause transition.

Self-employed women, with shorter experience (> 10 years), and in poor economic condition, experienced worse menopausal symptoms ($p > 0.05$) in contrast to full-time employment, job experience < 10 years, and good economic situation. This agrees with studies that have shown economic stress and less stable career trajectories as factors leading to poorer menopausal experience [25, 26].

Women with chronic illnesses most notably dyslipidemia reported significantly worse symptoms ($p = 0.042$). These medical conditions, especially cardiovascular diseases, can also affect women's work capacity through decreased energy and physical functioning[27]. Combined with common menopausal symptoms like fatigue and arthralgia, these can reduce productivity and lead to some women shortening their working hours or even leaving the job early. Furthermore, [11] stated that majority of menopausal women (30%) feel that their health problems are not adequately recognized in the workplace, which may also contribute to the negative impact of long-term health problems.

The current study found that women who get menopause information from informal sources, such as friends or the internet, had a higher number of menopausal symptoms than women who obtained information from health professionals. Although this difference was not found to be statistically significant. This result may reflect the impact of misinformation, anecdotal advice, or the absence of

appropriate guidance on symptom awareness and self-care. These findings are supported by [18], who found that women who were relying on inconsistent internet sources or friends were more likely to hold misconceptions about menopause and to experience more psychological distress. [28] also highlighted the need for appropriate and culture-related menopause education, as a lack of professional guidance led to increased anxiety scores and poorer symptom management. The findings of this research concur with existing research, emphasizing the significant role of socioeconomic status, work, and working conditions in menopausal women's coping mechanisms. Women with more secure working and economic situations demonstrated superior coping abilities as expected, aligning with existing research that suggests economic and employment stability are essential factors in menopausal symptom management[6, 29].

Results indicate that full-time workers rated higher than self-employed women in coping at work, demonstrating the level of hardship it is for women to manage in more insecure work conditions. Results concur with [30], who identified workplace policies' influence on reducing menopausal symptoms. Further, women with low economic status scored less on coping than the women belonging to the wealthier conditions, affirming once more, economically, how well-being is transformed into coping with menopause[28, 31].

The large disparity in coping scores between work locations ($p = 0.035$) illustrated that women in professional, administrative, and health occupations coped better compared to working in private businesses or manual labor. This agrees with [32], who suggested that workplace type and culture play a crucial role in supporting women during menopause. Adjustments such as flexibility in working hours and workplace environmental control could be the reason for such improved coping.

The coping strategies identified in this study—i.e., distraction, peer conversation, physical activity, and variable working hours—are consistent with those provided by [7] and [32]. They refer to how women actively participate to minimize menopausal symptoms, especially physical symptoms like hot flashes, which may be exacerbated by working conditions. Yet, as pointed out by [7], poor work conditions can further complicate coping, with fatigue and hot flashes interfering with the working lives of women. On the other hand, educational level made no statistically significant difference to coping strategies, which would suggest that adjustment in the workplace is influenced more by practical socioeconomic factors than by levels of education.

The findings of the study revealed that only 19.1% of women indicated that their work environment supported them in any way, and 34.6% perceived menopause as a stigmatized condition. The study reveals persistent workplace gaps in awareness and menopause support. This is in line with previous studies that show that the majority of women fail to go to their managers to talk about menopause problems for fear of judgment or stigmatization, thereby having no access to solutions or support [6].

Culturally, the majority of women wish to break taboo work issues related to menopause but are constrained by cultural stigma and societal norms, which limit conversations with co-workers and supervisors[24]. This cultural stigma adds to the challenges that women face in managing menopausal

symptoms at the workplace, adding another strain on their physical as well as mental health[33, 34]. Besides, menopause is also thought to be embarrassing or socially stigmatized in most of the world, and consequently, there is additional psychological and physical tension at this time of life. Such tension also exacerbates physical symptoms like hot flashes, fatigue, and insomnia, as well as psychological symptoms like anxiety and depression[35].

Limitations of the Study

The current study has some limitations. The recruitment of participants was challenging due to the time limit during working hours to complete the questionnaires. Moreover, a few women were not willing to speak freely due to the cultural sensitivity of the topic and the social taboo of menopause. Furthermore, the reliance on self-reported data to quantify symptoms such as pain and fatigue has the potential to result in response bias and a lack of objective measurement.

Recommendations

Future studies in the Middle East and Palestine should explore menopausal experience more intensively, particularly through qualitative methods such as interviews or focus groups. This would provide a richer understanding of women's lived experiences, coping strategies, and sociocultural perceptions. It is important for the employers to take into consideration the policies that benefit menopausal women, including flexible working hours, individual restrooms, and open communication to discuss health concerns with supervisors. Governmental initiatives to reduce stigma and make it normal to discuss menopause. The initiatives should provide evidence-based information to counter misinformation and empower women with accurate knowledge. Menopause must be integrated as a key part of employee well-being, and employers must integrate it into general health and wellness strategies to develop a supportive and welcoming workplace.

Conclusion

These findings emphasize the need for menopause-related workplace interventions to mitigate symptoms, particularly for women transitioning. Proposed strategies include the conduct of health education classes, provision of psychosocial support, and provision of workplace accommodations that meet physical and emotional needs during this stage of life.

This study emphasizes Palestinian working women approaching menopause having complicated experiences that intermingle physical, psychological, and urogenital symptoms with working conditions, economic status, and attitudes within cultures. The findings showed limited institutional support available for employing personal coping mechanisms and the overwhelming impact of socioeconomic disparities in managing symptoms. Furthermore, persistent stigma about menopause continues to bar frank open discussion and workplace accommodations. These findings require speedy policy changes within the workplace, enhanced health literacy, and larger societal awareness to place menopausal women in empowering, understandable, and supportive roles at this moment in their lives.

Declarations

Conflict of Interest:

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Consent to Participate:

All participants were informed about the purpose, procedures, potential risks and benefits of the study before participation. Participation was entirely voluntary, and participants were informed that they could withdraw from the study at any time without any consequences. Written informed consent was obtained from all participants before data collection. Participants were also assured that their responses would remain confidential and would be used solely for research purposes.

Clinical Trial Number

Not Applicable

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Author Contribution

RI contributed to the conception, design, acquisition of data, analysis and interpretation of the data, and drafting of the manuscript. AN contributed to the conception and design, acquisition of data, analysis and interpretation of the data, and revision of the manuscript. RHS contributed to the acquisition of data, data management, analysis and interpretation of the data, and revision of the manuscript. HS contributed to the conception, design, analysis and interpretation of the data, drafting and revision of the manuscript, and was responsible for the correspondence of the manuscript. MD contributed to the supervision of the study, methodology of the study, analysis and interpretation of the data, and revision of the manuscript.

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References

1. Awad Ibrahim Tayyem E, Tosson Labib A, Mohammed Ebrahim R, Morsy yousif A. Coping Strategies with Menopausal Symptom among Palestinian Women. *Egypt J Health Care*. 2022;13:697–710. <https://doi.org/10.21608/ejhc.2022.265084>.
2. Belkebir S, Saudi L, Nassar B, Nabresi N, Abuawad M. Menopausal Symptoms and Quality of Life among Palestinian Women: A Cross-Sectional Study. *Palestinian Med Pharm J*. 2024;9:171–80. <https://doi.org/10.59049/2790-0231.1356>.
3. O'Neill MT, Jones V, Reid A. Impact of menopausal symptoms on work and careers: a cross-sectional study. *Occup Med (Chic Ill)*. 2023;73:332–8. <https://doi.org/10.1093/occmed/kqad078>.
4. The 2022 hormone therapy position statement of The North American Menopause Society. *Menopause*. 2022;29:767–94. <https://doi.org/10.1097/GME.0000000000002028>.
5. Barber K, Charles A. Barriers to Accessing Effective Treatment and Support for Menopausal Symptoms: A Qualitative Study Capturing the Behaviours, Beliefs and Experiences of Key Stakeholders. *Patient Prefer Adherence* 2023;Volume 17:2971–80. <https://doi.org/10.2147/PPA.S430203>
6. Hardy C, Griffiths A, Norton S, Hunter MS. Self-help cognitive behavior therapy for working women with problematic hot flushes and night sweats (MENOS@Work): a multicenter randomized controlled trial. *Menopause*. 2018;25:508–19. <https://doi.org/10.1097/GME.0000000000001048>.
7. Verdonk P, Bendien E, Appelman Y. Menopause and work: A narrative literature review about menopause, work and health. *Work*. 2022;72:483–96. <https://doi.org/10.3233/WOR-205214>.
8. Hardy C, Griffiths A, Hunter MS. What do working menopausal women want? A qualitative investigation into women's perspectives on employer and line manager support. *Maturitas*. 2017;101:37–41. <https://doi.org/10.1016/j.maturitas.2017.04.011>.
9. Hardy C. Menopause and the workplace guidance: What to consider. *Post Reprod Health*. 2020;26:43–5. <https://doi.org/10.1177/2053369119873257>.
10. Abbas SS, Majeed T, Nair BR, Forder P, Weaver N, Byles J. Burden of atrial fibrillation and stroke risk among octagenarian and nonagenarian women in Australia. *Ann Epidemiol*. 2020;44:31–e372. <https://doi.org/10.1016/j.annepidem.2020.02.004>.
11. Jay R, Angco N. PUBLIC HEALTH RESEARCH Women in Menopause and The Workplace Experience: A Meta-Synthesis. 2025.
12. Peate M, Johnson TL, Avis NE, Hickey M. Addressing sociodemographic, socioeconomic, and gendered disparities for equity in menopause care. *Cell Rep Med*. 2024;5:101616.

<https://doi.org/10.1016/j.xcrm.2024.101616>.

13. Yoeli H, Macnaughton J, McLusky S. Menopausal symptoms and work: A narrative review of women's experiences in casual, informal, or precarious jobs. *Maturitas*. 2021;150:14–21. <https://doi.org/10.1016/j.maturitas.2021.05.007>.
14. Nassar B. 11344302, & NN, 11316141. Menopausal symptoms and quality of life among Palestinian women visiting primary care clinics in Nablus, a cross sectional study 2018–2019. In Faculty of Medicine and Health Sciences, An-Najah National University. 2019.
15. State of Palestine Palestinian Central Bureau of Statistics Standards. Methods and Quality Directorate Bulletins series by Methods, Classification and Standards Department Manual of Statistical Indicators Provided by Palestinian Central Bureau of Statistics 2024. 2025.
16. Menopause. identification and management NICE guideline. 2015.
17. Ali R, YF. Coping mechanisms for menopausal symptoms among Palestinian women. *J Women's Health Wellness*. 2021;12:245–59.
18. Hajesmaeel-Gohari S, Shafiei E, Ghasemi F, Bahaadinbeigy K. A study on women's health information needs in menopausal age. *BMC Womens Health*. 2021;21:434. <https://doi.org/10.1186/s12905-021-01582-0>.
19. Assaf EA, Gharaibeh MK, Abuhammad S, AbuRuz M. Quality of life of Jordanian menopausal working and retired women and its associated factors: a cross-sectional study. *F1000Res*. 2024;11:1189. <https://doi.org/10.12688/f1000research.125887.2>.
20. D'Angelo S, Bevilacqua G, Hammond J, Zaballa E, Dennison EM, Walker-Bone K. Impact of Menopausal Symptoms on Work: Findings from Women in the Health and Employment after Fifty (HEAF) Study. *Int J Environ Res Public Health*. 2022;20:295. <https://doi.org/10.3390/ijerph20010295>.
21. Nandan N, Mohan A. Menopausal Symptoms and Menopausal Rating Scale among Midlife Women: A Hospital-based Study. *J Midlife Health*. 2023;14:191–5. https://doi.org/10.4103/jmh.jmh_81_23.
22. Nappi RE, Palacios S. Impact of vulvovaginal atrophy on sexual health and quality of life at postmenopause. *Climacteric*. 2014;17:3–9. <https://doi.org/10.3109/13697137.2013.871696>.
23. Beck V, Brewis J, Davies A. Women's experiences of menopause at work and performance management. *Organization*. 2021;28:510–20. <https://doi.org/10.1177/1350508419883386>.
24. Kopenhager T, Guidozi F. Working women and the menopause. *Climacteric*. 2015;18:372–5. <https://doi.org/10.3109/13697137.2015.1020483>.
25. Rodrigo CH, Sebire E, Bhattacharya S, Paranjothy S, Black M. Effectiveness of workplace-based interventions to promote wellbeing among menopausal women: A systematic review. *Post Reprod Health*. 2023;29:99–108. <https://doi.org/10.1177/20533691231177414>.
26. Kochersberger A, Coakley A, Millheiser L, Morris JR, Manneh C, Jackson A, et al. The association of race, ethnicity, and socioeconomic status on the severity of menopause symptoms: a study of 68,864 women. *Menopause*. 2024;31:476–83. <https://doi.org/10.1097/GME.0000000000002349>.

27. Lange-Maia BS, Karavolos K, Avery EF, Strotmeyer ES, Karvonen-Gutierrez CA, Appelhans BM, et al. Contribution of common chronic conditions to midlife physical function decline: The Study of Women's Health Across the Nation. *Womens Midlife Health*. 2020;6:6. <https://doi.org/10.1186/s40695-020-00053-0>.
28. Yazdkhasti M, Simbar M, Abdi F. Empowerment and Coping Strategies in Menopause Women: A Review. *Iran Red Crescent Med J*. 2015;17. <https://doi.org/10.5812/ircmj.18944>.
29. Butler C. Managing the Menopause through 'Abjection Work': When Boobs Can Become Embarrassingly Useful, Again. *Work Employ Soc*. 2020;34:696–712. <https://doi.org/10.1177/0950017019875936>.
30. Carter S, Davis S, Black KI. Menopause workplace policy: The way forward or backward? *Australian and New Zealand J Obstet Gynaecol*. 2021;61:986–9. <https://doi.org/10.1111/ajo.13445>.
31. Hammam RAM, Abbas RA, Hunter MS. Menopause and work – The experience of middle-aged female teaching staff in an Egyptian governmental faculty of medicine. *Maturitas*. 2012;71:294–300. <https://doi.org/10.1016/j.maturitas.2011.12.012>.
32. Griffiths A, MacLennan SJ, Hassard J. Menopause and work: An electronic survey of employees' attitudes in the UK. *Maturitas*. 2013;76:155–9. <https://doi.org/10.1016/j.maturitas.2013.07.005>.
33. Anto A, Basu A, Selim R, Eisingerich AB. Women's Menopausal Experiences in the UK: A Systemic Literature Review of Qualitative Studies. *Health Expect*. 2025;28. <https://doi.org/10.1111/hex.70167>.
34. Williams M. Culturally responsive care for menopausal women. *Maturitas*. 2024;185:107995. <https://doi.org/10.1016/j.maturitas.2024.107995>.
35. Hickey M, Hunter MS, Santoro N, Ussher J. Normalising menopause. *BMJ*. 2022;377:e069369. <https://doi.org/10.1136/bmj-2021-069369>.

Figures

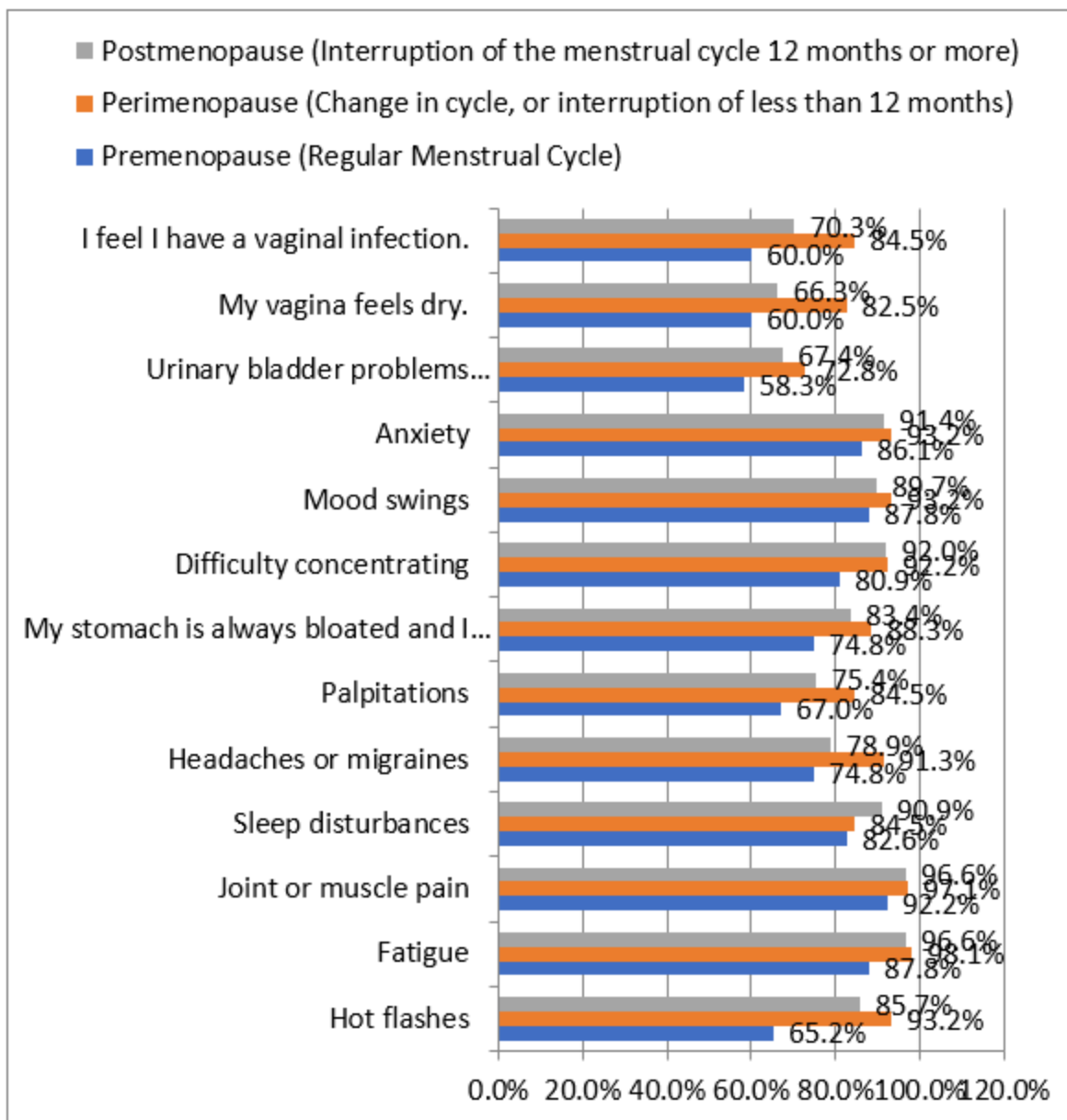


Figure 1

Menopausal Symptoms Distribution Across Menopausal Stages

Frequency and Percentage of Coping Strategy.