



## QUALITY OF LIFE AMONG POSTMENOPAUSAL WOMEN IN BAGHDAD/ ALKARKH

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Article Received: 05 December 2025

Article Revised: 25 December 2025

Article Published: 05 January 2026



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DOI: <https://doi.org/10.5281/zenodo.18152083>

**How to cite this Article:** <sup>1</sup>\*Sura Laith Mohammed, <sup>2</sup>Ban Juma Abed, <sup>3</sup>Enass Basim Mohammed Ali. (2026). QUALITY OF LIFE AMONG POSTMENOPAUSAL WOMEN IN BAGHDAD/ ALKARKH. World Journal of Advance Healthcare Research, 10(1), 93–101.

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## ABSTRACT

**Background:** The quality of life (QoL) among postmenopausal women can be significantly affected by menopausal symptoms and various sociodemographic factors. Understanding these associations is critical to guide clinical and public health interventions in family medicine. **Aim:** This study aimed to assess the impact of menopause on the quality of life among postmenopausal women in Baghdad. **Methods:** A cross-sectional study was conducted on 300 postmenopausal women selected using a convenience sampling method. Data collection tools included a structured questionnaire, the Menopause Rating Scale (MRS), and QoL perception items. Data were analyzed using descriptive statistics and chi-square tests to determine associations between symptom severity, quality of life, awareness, and healthcare consultation. **Results:** The mean age of participants was 56 years, and 98% did not use hormone replacement therapy. Moderate to severe somatic symptoms, particularly joint and muscular pain (61%), hot flashes (51%), and sleep disorders (63.7%) were prevalent. Psychological symptoms such as depressive mood and irritability were also common, while (76%) experienced severe urogenital symptoms. A majority (58%) reported a good overall QoL, and (87%) had never consulted a healthcare professional about menopause. There was a statistically significant association between the severity of menopausal symptoms and their interference with daily life ( $P=0.001$ ), but no significant association with quality of life perception, awareness level, or specialist consultation ( $P>0.05$ ). **Conclusions:** Most postmenopausal women experienced moderate to severe symptoms, which significantly disrupted their daily activities but were not proportionally reflected in perceived quality of life or healthcare utilization. Greater awareness, early symptom management, and accessible family medicine services are essential to improve QoL outcomes.

## INTRODUCTION

Today with increase life expectancy and life span, women spend one third of their life after menopause.<sup>[1]</sup>

Menopause is an adaptation process during which women go through a new biological state; this process is accompanied by many biological and psychological changes.<sup>[2]</sup>

Menopause is the permanent cessation of menstruation, confirmed after at least 12 consecutive months without a menstrual period. The term originates from the Greek words “menos” meaning month, and “pauis” meaning stop.<sup>[3]</sup>

The cessation results from reduction of ovarian hormone usually between 45–55 years.<sup>[4]</sup>

The WHO defines quality of life as individuals' perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns.<sup>[5]</sup>

During this period, women can experience many symptoms including hot flashes, night sweating, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, and reduction of muscle mass.<sup>[6]</sup>

Understanding the quality of life among postmenopausal women is crucial for developing targeted interventions to support this population. Research in this area not only highlights the challenges faced by postmenopausal women but also emphasizes the importance of holistic approaches to healthcare that address physical, emotional, and social needs.<sup>[7]</sup>

By exploring the factors that influence quality of life during menopause, health care providers can offer better guidance, treatment, and support systems to help women navigate this transition phase with dignity and improved well-being.<sup>[8]</sup> This study aims to assess the impact of menopause on the quality of life among postmenopausal women in Baghdad.

## SUBJECTS AND METHODS

### Study design

Descriptive cross-sectional study with analytic elements.

### Study duration

The current study was carried out during a period of six months from 1st of February 2025 to 30 of July 2025.

### Sample Size

The study was conducted on a convenient sample of 300 Iraqi postmenopausal women.

### Study setting

The study included a convenient sample from outpatients and employees of Obstetrics and Gynecology clinic of AL-IMAMMAIN Al-kadhmein medical city in Baghdad, AL ADEL Family health center (ALADEL SECTOR) AND ALMANSOR Family health care center (ALKARKH SECTOR). The data was collected four days per weekly, about 3 hours per day (18 to 20 women per day). Data was conducted from 25 of May to 25 of June.

### Inclusion criteria

The target population includes

1. All postmenopausal women who are within the age group of 45-60 years (after this age, symptoms of aging may overlap with symptoms associated with menopause, making it difficult to assess the impact of each separately).
2. Women with permanent cessation of menses for 12 month from last cycle.
3. Menopause women with natural cessation of menstruation that is not attributed to any pathological cause.
4. Who are willing to participate.

### Exclusion criteria

1. Women with early menopause (younger 45y).
2. Premature menopause (younger 40y).
3. Women who use hormonal therapy (for other disease).
4. Pregnant and lactation women.

5. Women who refused to participate or didn't complete the questionnaire.

### Data collection

Data was collected through direct interview with all postmenopausal women age (45-60) years to complete the data included in questionnaire.

The applied questionnaire consisted of five parts used menopausal rating scale (MRS)<sup>[9]</sup>, and other parts specially designed written structured questionnaire by the researcher and modified by supervisors and specialized family medicine and translate to Arabic language by researcher.

*First part/* consisted of socio-demographic data of participants (age, marital state, educational level, employment status).

*Second part/* consisted of menopausal history of participants (age at menopause, did she take hormonal replace therapy, did she take medication or supplement for menopausal symptoms).

*Third part/* consist of life style and health related question (did she smoke, level of physical activity, chronic disease).

*Forth part/* about MRS to assessment of knowledge about menopausal symptoms (11 questions) first four about somatic physical symptoms.

That included: Hot flash, heart discomfort, sleep problem, joint and muscle discomfort.

Second four about psychological symptoms that include: depressive mood, irritability, anxiety, physical and mental exhaustion.

Third three about Urological symptoms that include: sexual problems, bladder problem, vaginal dryness.

Each question had five possible responses: (none, mild, moderate, sever, very sever)

None	0
Mild	1
Moderate	2
sever	3
Very sever	4

*Fifth part/* included additional question that include: overall quality of life, did menopausal symptoms interfere with daily activity, If she consulted a health care professional about menopause related concerns.

### Data entry and analysis

Data entry was done using Microsoft Excel 2019. Data was recorded into different quantitative and qualitative variables for the purpose of analysis.

Data analysis was performed using the Statistical Package for Social Sciences (SPSS), version 26.

Data was summarized using measures of frequency (mean), dispersion (Standard deviation), tables and graphs. P value of less than or equal to 0.05 was Likert scale: This total score determines the impairment of QoL in the form of no or little (score 0–4), mild (score 5–8), moderate (score 9–16), and severe (score 17–44). For the purpose of analysis, moderate-to-severe impairment in quality of life was categorized as poor quality of life.

0-4	No or little
5-8	Mild
9-16	Moderate
17-44	Sever

### Approval and official permission

An approval was taken from the scientific committee of the scientific council of Family Medicine – Arab Board for Health Specializations.

### Ethical consideration

Formal approval was taken from the scientific committee of Arabic Board of family medicine, from ALKARKH directorate from family health care center, ALKADMIA medical city in BAGHDAD /ALKARKH (present in appendix). Verbal consent was taken from all women who participant after explaining the aim of study.

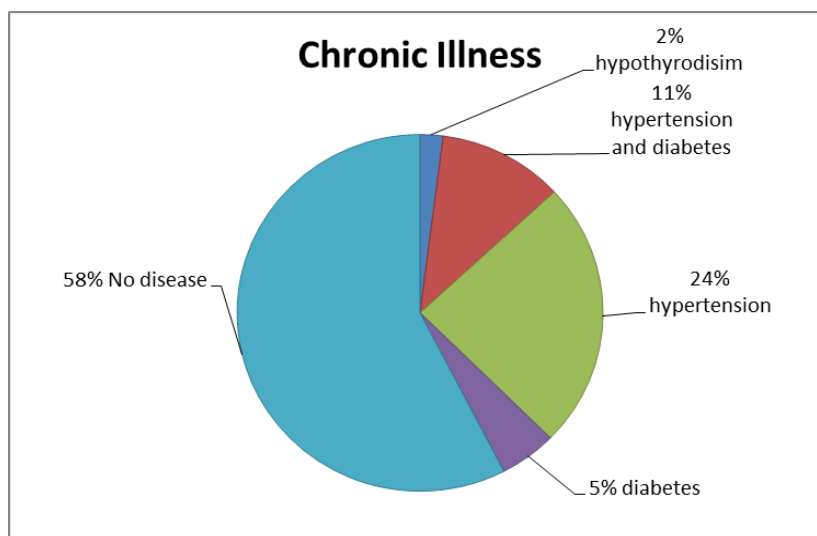
## RESULTS

**Table 1: Distribution of participants according to demographic, lifestyle and menopausal characteristics (N=300)**

Age	Mean	S.D
	56.00	4.049
Age at menopause	49.97	3.46
Marital Status	Frequency	Percent
Single	22	7.3
Married	190	63.3
Divorced	30	10
Widow	58	19.3
Education Level	Frequency	Percent
No formal education	41	13.7
Primary	50	16.7
Secondary	84	28
Higher	125	41.7
Employment Status	Frequency	Percent
Unemployed	8	2.7
Employed	103	34.3
Homemaker	148	49.3
Retired	41	13.7
Place of Residence	Frequency	Percent
Urban	300	100
Do you smoke?	Frequency	Percent
No	296	98.7
Yes	4	1.3
How would you describe your physical activity level?	Frequency	Percent
Active (regular sports/exercise)	4	1.3
Moderate (walking/light exercise)	181	60.3
Sedentary (little/no physical activity)	115	38.3
Do you have any chronic illnesses?	Frequency	Percent
No	174	58
Yes	126	42
Do you take hormone replacement therapy (HRT)?	Frequency	Percent
No	294	98
Yes	6	2
Do you take any medications or supplements for menopausal symptoms?	Frequency	Percent
No	282	94
Yes	18	6

Table 1 shows that the sample included 300 women with an average age of 56 years. The marital status of the participants was mostly married (190 women, 63.3%). 41.7% of them had higher education (university degrees, master's, and doctorate), while 28% had secondary education. As for employment status, the results showed that 148 (49.3%) were housewives and 103 (34.3%) were employees. The results also showed that 98.7% of the

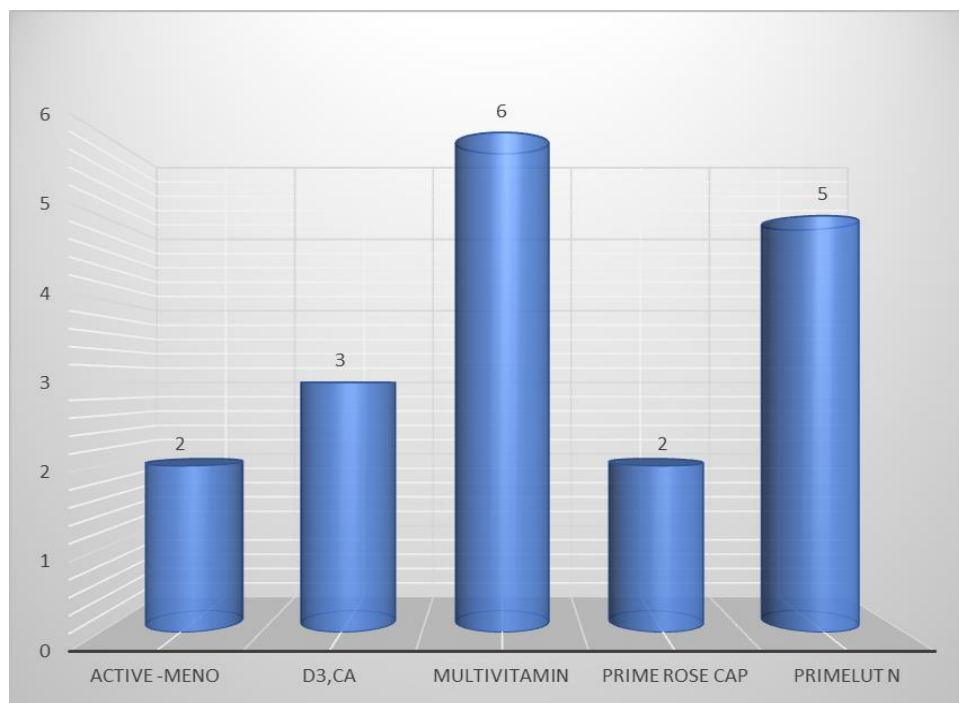
participants did not smoke, more than 60% engaged in moderate-intensity activity, and 42% suffered from chronic diseases. 98% of the participants did not take any hormone replacement therapy, while only 6% of them took complementary medications. These included multivitamins, evening primrose oil, vitamin D with calcium, and other non-hormonal preparations. which are shown in figure 4.2.



**Figure 1: Distribution of the participants by their type of chronic illness.**

Figure 1 shows that 24% of the participants suffered from hypertension, 11% had diabetes and hypertension,

while only 5% had diabetes and 2% had hypothyroidism according to figure 4.1.



**Figure 2: Distribution of the participants by types of drugs taken for menopausal symptoms.**

Among figure 2 that show only 6% (18 women) took complementary medication, that included : 6 participant take multivitamins, 5 participant take primelut N, 3

participant take vitamin D3 and calcium, 2 participant take Active menoand 2 participant take prime rose cap.

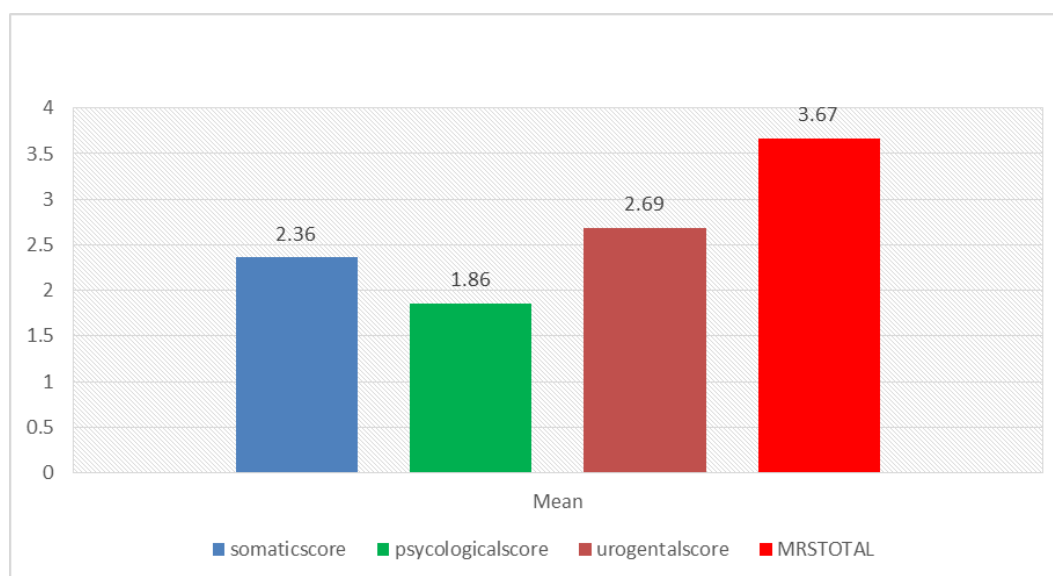
**Table 2: Distribution of participants according to menopause rating scale (MRS).**

<b>I. Somatic Symptoms (Physical Symptoms)</b>		<b>None</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Very severe</b>
1	Hot flashes, sweating (episodes of sweating, night sweats)	3 (1%)	46 (15.3%)	98 (32.7%)	101 (33.7%)	52 (17.3%)
2	Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness)	78 (26%)	107 (35.7%)	74 (24.7%)	34 (11.3%)	7 (2.3%)
3	Sleep problems (difficulty falling asleep, difficulty staying asleep, waking up too early)	41 (13.7%)	68 (22.7%)	115 (38.3%)	56 (18.7%)	20 (6.7%)
4	Joint and muscular discomfort (joint pain, swelling, muscle weakness)	11 (3.7%)	40 (13.3%)	66 (22%)	108 (36%)	75 (25%)
<b>II. Psychological Symptoms</b>		<b>None</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Very severe</b>
5	Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings)	45 (15%)	129 (43%)	88 (29.3%)	26 (8.7%)	12 (4%)
6	Irritability (feeling nervous, inner tension, feeling aggressive)	98 (32.7%)	122 (40.7%)	59 (19.7%)	13 (4.3%)	8 (2.7%)
7	Anxiety (inner restlessness, feeling panicky)	92 (30.7%)	133 (44.3%)	49 (16.3%)	19 (6.3%)	7 (2.4%)
8	Physical and mental exhaustion (general decrease in performance, impaired memory, decreased concentration, forgetfulness)	59 (19.7%)	86 (28.7%)	73 (24.3%)	67 (22.3%)	15 (5%)
<b>III. Urogenital Symptoms</b>		<b>None</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Very severe</b>
9	Sexual problems (change in sexual desire, activity, and satisfaction)	100 (33.3%)	94 (31.3%)	75 (25%)	25 (8.4%)	6 (2%)
10	Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence)	29 (9.7%)	43 (14.3%)	100 (33.3%)	111 (37%)	17 (5.7%)
11	Vaginal dryness (sensation of dryness or burning in the vagina, difficulty with sexual intercourse)	48 (16%)	52 (17.3%)	81 (27%)	92 (30.7%)	27 (9%)

Table 2 shows the severity of the participants' menopausal symptoms according to the menopause rating scale (MRS) scores. The results were divided into five groups (none, mild, moderate, severe, and very severe) and broken down by domain (physical, psychological, and urogenital).

- Somatic symptoms: Moderate to severe symptoms were reported by over 90% of participants. Joint and muscular discomfort (36% severe, 25% very severe) and hot flashes (34% severe) were the most prevalent.

- Psychological symptoms: A majority experienced moderate symptoms (42%) or severe symptoms (29%), with irritability and depressive mood being the most common.
- Urogenital symptoms: These were the most severe, with 79% of women reporting severe complaints. Vaginal dryness and bladder issues were particularly prominent. The mean domain scores were: somatic 2.36, psychological 1.86, urogenital 2.69, and a total average MRS score of 3.67 as shown in figure (3).

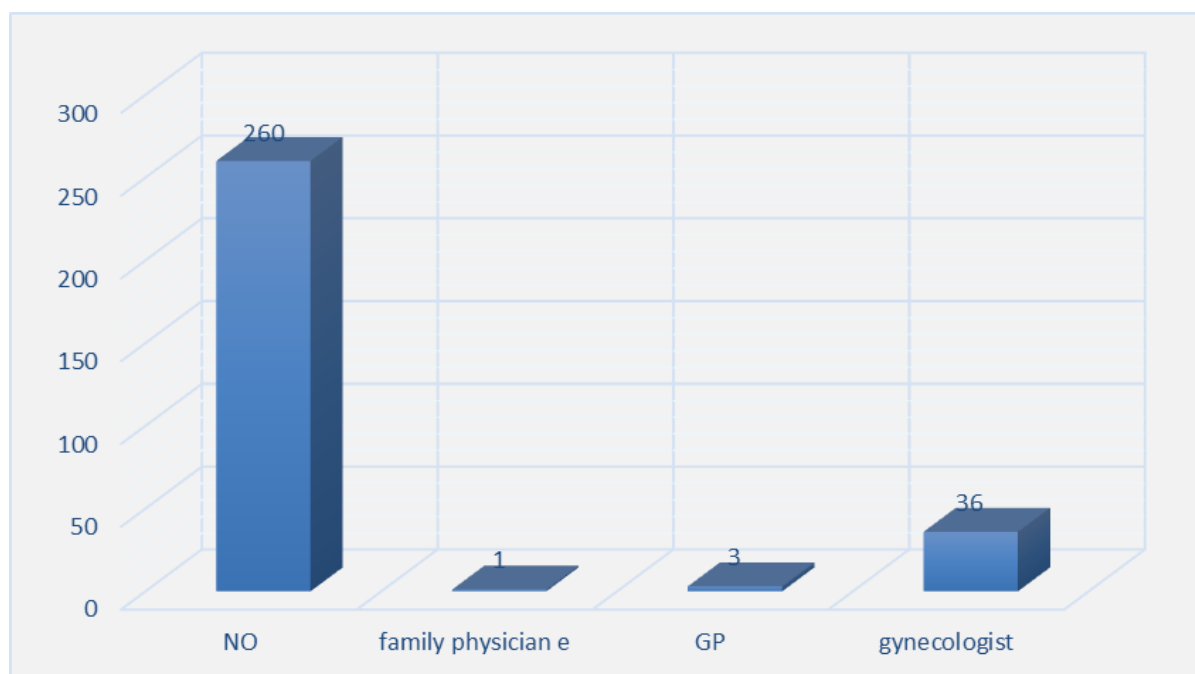
**Figure 3: Total and subscale MRS mean scores.**

**Table 3: Distribution of the participants according to their Perceptions of Quality of Life, Impact of Menopausal Symptoms, Awareness, and Healthcare Consultation.**

<b>Overall Quality of Life:</b>	<b>Frequency</b>	<b>Percent</b>
very poor	1	0.3
poor	14	4.7
fair	85	28.3
good	171	58
very good	29	9.7
<b>Do menopausal symptoms interfere with your daily life?</b>	<b>Frequency</b>	<b>Percent</b>
not at all	112	37.3
slightly	108	36
moderately	75	25
severely	5	1.7
<b>Do you feel informed about menopause and its symptoms?</b>	<b>Frequency</b>	<b>Percent</b>
not informed	21	7
somewhat	124	41.3
yes fully	155	51.7
<b>Have you consulted a healthcare professional about menopause-related concerns?</b>	<b>Frequency</b>	<b>Percent</b>
No	260	87
Yes	40	13

Regarding the perceived quality of life, the results showed that 58% of the participants had a good quality of life and 28.3% had a fair quality of life. 25% of the participants had moderate menopausal symptoms and 36% had mild menopausal symptoms. 51% of the

participants had a good understanding of menopause and its symptoms. 87% of the participants did not consult a doctor for advice on menopausal symptoms. According to table 3.

**Figure 4.4: Distribution of the participants according to type of healthcare professionals consulted for their menopausal symptoms.**

Among figure 4 that show 86.7% of participant were not consult any health care professional and just 13.3% of them consulted health care professional (40 women), that

includes: 36 women consult gynecologist, 3 women consult general practitioner and just one consult family physician.



**Table 4: Relationship between the MRS level and socio-demographic characteristics.**

Comparison between the MRS level and socio-demographic characteristics.							
Variables	MRS level						P value
age	mild		moderate		severe		
45-55 years	7	5.4%	32	24.8%	90	69.8%	0.548
>55 years	5	2.9%	43	25.1%	123	71.9%	
Marital Status	mild		moderate		severe		P value
divorced	2	6.7%	5	16.7%	23	76.7%	0.582
married	8	4.2%	50	26.3%	132	69.5%	
single	1	4.5%	8	36.4%	13	59.1%	
widow	1	1.7%	12	20.7%	45	77.6%	
Education Level	mild		moderate		severe		P value
higher	5	4%	38	30.4%	82	65.6%	0.057
no formal education	3	7.3%	10	24.4%	28	68.3%	
primary	1	2%	4	8%	45	90%	
secondary	3	3.6%	23	27.4%	58	69%	
Employment Status	mild		moderate		severe		P value
employed	5	4.9%	31	30.1%	67	65%	0.416
homemaker	5	3.4%	31	20.9%	112	75.7%	
retired	1	2.4%	10	24.4%	30	73.2%	
unemployed	1	12.5%	3	37.5%	4	50%	
Do you smoke?	mild		moderate		severe		P value
No	12	4.1%	74	25%	210	70.9%	0.918
Yes	0	0.0%	1	25%	3	75%	
How would you describe your physical activity level?	mild		moderate		severe		P value
active	0	0.0%	3	75%	1	25%	0.178
moderate	6	3.3%	46	25.4%	129	71.3%	
sedentary	6	5.2%	26	22.6%	83	72.2%	
chronic illness	mild		moderate		severe		P value
no	5	2.9%	43	25%	124	72.1%	0.582
DM	2	11.8%	3	17.6%	12	70.6%	
HT	2	2.8%	20	28.2%	49	69%	
HT,DM	2	6.1%	8	24.2%	23	69.7%	
hypothyroidism	1	14.3%	1	14.3%	5	71.4%	
Do you take hormone replacement therapy (HRT)?	mild		moderate		severe		
No	11	3.7%	75	25.5%	208	70.7%	0.288
Yes	1	16.7%	0	0.0%	5	83.3%	
Pearson Chi-Square statistically significant*							

As regards to the relationship between the severity of menopausal symptoms and socio demographic characteristics, Table 4 showed that there was no statistically significant association between the severity of menopausal symptoms and current age, marital status, level of education, occupation, smoking, physical exercise, chronic illness and hormonal replacement and medications (p value >0.05).

Participants of 45–55 years: 69.8% had severe symptoms. >55 years: 71.9% had severe symptoms. Highest proportion of severe symptoms was among widows (77.6%) and divorced women (76.7%). Women with primary education showed the highest proportion of severe symptoms (90%). Women with higher education had a lower proportion (65.6%) of severe symptoms. Homemakers (75.7%) and retired women (73.2%)

showed more severe symptoms than employed women (65%). Small sample of smokers (only 4), but 75% had severe symptoms. Women with moderate or sedentary activity levels showed similar severe symptom rates (71%–72%). Participants with diabetes + hypertension (HT, DM) or hypothyroidism had high levels of severe symptoms. Those not using HRT: 70.7% had severe symptoms.

**Table 5: Association Between Menopausal Rating Scale (MRS) and Quality of Life, Symptom Awareness, and Healthcare-Seeking Behavior".**

Variables	MRS level						P value
Overall Quality of Life:	Mild		Moderate		Severe		
Very poor	0	0.0%	0	0.0%	1	100%	0.989
Poor	1	7.1%	2	14.3%	11	78.6%	
Fair	3	3.5%	22	25.9%	60	70.6%	
Good	7	4.1%	44	25.7%	120	70.2%	
Very good	1	3.4%	7	24.1%	21	72.4%	
Do menopausal symptoms interfere with your daily life?	Mild		Moderate		Severe		P value
Not at all	11	9.8%	47	42%	54	48.2%	0.001*
Slightly	1	0.9%	18	16.7%	89	82.4%	
Moderately	0	0.0%	10	13.3%	65	86.7%	
Severely	0	0.0%	0	0.0%	5	100%	
Do you feel informed about menopause and its symptoms?	Mild		Moderate		Severe		P value
Not informed	1	4.8%	4	19%	16	76.2%	0.431
Somewhat	2	1.6%	34	27.4%	88	71%	
Yes fully	9	5.8%	37	23.9%	109	70.3%	
Have you consulted a healthcare professional about menopause-related concerns?	Mild		Moderate		Severe		P value
No	10	3.8%	64	24.6%	186	71.5%	0.858
Family physician	0	0.0%	0	0.0%	1	100%	
GP	0	0.0%	0	0.0%	3	100%	
Gynecologist	2	5.6%	11	30.6%	23	63.9%	
Pearson Chi-Square							statistically significant*

Regarding the relationship between the severity of menopausal symptoms and Perceptions of Quality of Life, Impact of Menopausal Symptoms, Awareness, and Healthcare Consultation, Table (5) demonstrated that there was no statistically significant association between the severity of menopausal symptoms and perceived quality of life, the level of information received about menopausal symptoms, or the type of specialist consulted regarding menopause concerns ( $p$ -value > 0.05). While statistically significant association ( $p=0.001$ ) indicating that symptom severity strongly correlates with how much menopause disrupts daily activities. Among the participants, 86.7% of those who reported moderate interference in daily life experienced severe menopausal symptoms, while all women (100%) who reported severe interference had severe symptoms.

## DISCUSSION

The Menopause Rating Scale (MRS) results revealed that somatic and urogenital symptoms were the most severe. Over 90% of participants reported moderate to very severe somatic symptoms, especially joint and muscular pain (36% severe, 25% very severe) and hot flashes (34% severe). These symptoms are primarily linked to estrogen deficiency, affecting thermoregulation, bone density, and joint health.<sup>[7]</sup>

Psychological symptoms such as irritability, depressive mood, and anxiety were reported by more than 70% of women.

Urogenital symptoms emerged as the most distressing domain, with 76% reporting moderate to very severe symptoms like vaginal dryness and urinary complaints. These issues are associated with genitourinary syndrome of menopause due to estrogen decline, which results from the thinning and loss of elasticity in the urogenital tissues due to estrogen decline. Figure 4.3 illustrates the mean domain scores: urogenital (2.69) > somatic (2.36) > psychological (1.86).

## Quality of Life and Awareness

Despite the symptom burden, 58% of participants rated their quality of life as "good" and 9.7% as "very good," suggesting a degree of adaptation or resilience, as previously reported by AlQuaiz, Tayel and Habib in Saudi Arabia, 2020.<sup>[10]</sup> However, 25% of the participants reported experiencing a moderate level of interference with their daily activities.

Although 51.7% of participants reported being well-informed about menopause, only 13% had consulted a healthcare provider. This highlights a substantial care gap and is in line with Abdul Rahim, Khalil and Hassan in the UAE, 2023(77) who found that stigma and lack of menopause-specific services limited healthcare-seeking behavior. Also, most women may normalize menopause as a non-pathological life stage. Among those who did seek care, most consulted gynecologists (63.9%), indicating the minimal engagement with family physicians and general practitioners and a potential gap



in primary care involvement, suggesting that menopausal care perceived as part of gynecology only.

However, given the small proportion who seek help, more public health initiatives are needed to promote menopause literacy and support.

There were no statistically significant associations between MRS severity and age, marital status, education, employment, smoking status, chronic illness, physical activity, HRT use, or supplement use ( $p > 0.05$ ). While trends suggested more severe symptoms among homemakers and less educated women, the differences were not significant. This contrasts with Asadi, Mahdavi and Hashemi, 2021<sup>[11]</sup>, who found significant associations between low education, unemployment, and greater symptom severity.

Interestingly, although only six women used HRT, those who did had a high proportion of severe symptoms. This may reflect selection bias only those with severe distress may have opted for HRT. Nappi and Davis, 2020<sup>[7]</sup> noted that delayed initiation of HRT due to fear or misinformation may limit its effectiveness.

The only significant association observed was between the severity of MRS scores and the degree to which menopausal symptoms interfered with daily life ( $p = 0.001$ ).

## CONCLUSIONS

Most postmenopausal women experienced moderate to severe symptoms, which significantly disrupted their daily activities but were not proportionally reflected in perceived quality of life or healthcare utilization. Greater awareness, early symptom management, and accessible family medicine services are essential to improve QoL outcomes.

## REFERENCES

- Freeman EW. Associations of depression with the transition to menopause. *Menopause*, 2010; 17(4): 823–7.
- Avis NE, Crawford SL, Greendale G, Bromberger JT, Everson-Rose SA, Gold EB, et al. Duration of menopausal vasomotor symptoms over the menopause transition. *JAMA Intern Med.*, 2015; 175(4): 531–9.
- Panay N, Edmonds DK. Dewhurst's textbook of obstetrics and gynaecology, 2007.
- Burger HG, Hale GE, Robertson DM, Dennerstein L. A review of hormonal changes during the menopausal transition: focus on findings from the Melbourne Women's Midlife Health Project. *Hum Reprod Update*, 2007; 13(6): 559–65.
- Group W. The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. *Soc Sci Med.*, 1995; 41(10): 1403–9.
- Nelson HD. Menopause. *Lancet*, 2008; 371(9614): 760–70.
- Nappi RE, Davis SR. The use of hormone therapy for the maintenance of urogynecological and sexual health post WHI. *Climacteric*, 2012; 15(3): 267–74.
- Mishra GD, Kuh D. Health symptoms during midlife in relation to menopausal transition: British prospective cohort study. *Bmj.*, 2012; 344.
- Heinemann K, Ruebig A, Potthoff P, Schneider HPG, Strelow F, Heinemann LAJ, et al. The Menopause Rating Scale (MRS) scale: a methodological review. *Health Qual Life Outcomes*, 2004; 2: 45.
- AlQuaiz AM, Tayel SA, Habib FA. Assessment of symptoms of menopause and their severity among Saudi women in Riyadh. *Ann Saudi Med.*, 2013; 33(1): 63–7.
- Asadi M, Jouyandeh Z, Nayeibzadeh F. Prevalence of menopause symptoms among Iranian women. *J Fam Reprod Heal*, 2012; 1–3.