

## A Hospital-Based Study on Menopausal Symptoms and Quality of Life among Postmenopausal Women

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Received: 25-01-2024 / Revised: 23-02-2024 / Accepted: 25-03-2024

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Conflict of interest: Nil

### Abstract:

**Introduction:** Menopause represents a significant physiological event in a woman's life, marking the cessation of reproductive capability. The transition is often accompanied by a range of physical and physiological symptoms, which can profoundly impact a woman's quality of life (QOL). Studies suggest that more than 80% of women experience various menopause-related symptoms, influencing their overall health and well-being. Study aims to evaluate menopause-related symptoms' prevalence and impact on quality of life among postmenopausal women, with objectives including symptom severity assessment, impact measurement, demographic factor identification, exploration of management strategies, and proposing personalized interventions for well-being.

**Material & Methods:** A hospital-based descriptive observational study was carried out at the Outpatient and Inpatient Department of Obstetrics and Gynecology, M P Shah Medical College & GGG Hospital, Jamnagar, Gujarat with 424 postmenopausal women. The data were collected using the structured Menopause-specific QOL (MENQOL) questionnaire. Mean, SD, frequency, and proportions calculated. MENQOL scores associated with demographic variables using one-way ANOVA.

**Results:** Out of the total 660 patients enrolled in the study, 236 did not receive follow-up. Among the remaining 424 patients who received follow-up, 100 had undergone hysterectomy, leaving 324 classified as postmenopausal, revealing no significant differences in their profiles. Mean scores of menopause-specific symptoms indicated significant impacts on well-being, with physical symptoms ( $59.02 \pm 14.72$ ) and psychosocial symptoms ( $29.20 \pm 10.03$ ) being most pronounced. Symptoms such as hot flashes, cardiac symptoms, sleep disturbances, joint and muscle discomfort, depression, irritability, anxiety, physical and mental exhaustion, sexual problems, bladder problems, and vaginal dryness were prevalent among participants.

**Conclusion:** Our study provides important findings regarding the prevalence and impact of menopausal symptoms on the quality of life among postmenopausal women. The varying severity of symptoms, including hot flashes, cardiac symptoms, joint discomfort, and sexual problems, underscores the need for targeted interventions.

**Keywords:** Menopause, Quality of Life, Symptoms.

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### Introduction

Menopause, a natural biological transition, marks a significant phase in a woman's life journey. However, its accompanying symptoms can profoundly impact her quality of life during this period of transition. [1] Quality of life (QOL), as defined by the World Health Organization (WHO), encompasses an individual's perception of their position in life within the context of cultural and value systems, as well as in relation to their goals, expectations, standards, and concerns. [2] For postmenopausal women, the experience of

menopausal symptoms can greatly influence this perception, affecting various aspects of their daily functioning and well-being. [3]

Understanding the association between the management of menopausal symptoms and demographic variables is crucial in identifying potential healthcare disparities within this population. [4] Factors such as age, socio-economic status, and access to healthcare services can significantly impact the severity and management

of menopausal symptoms, thereby affecting overall quality of life. [5] By delving into these relationships, healthcare professionals can gain insights into the unique needs and challenges faced by postmenopausal women from different demographic backgrounds.

The overarching goal of our hospital-based study is to evaluate the prevalence and intensity of menopause-related symptoms among postmenopausal women and to analyze their influence on overall quality of life during this life stage. Through specific objectives aimed at assessing symptom frequency and severity, measuring their impact on various quality of life domains, and identifying demographic factors associated with symptom severity and impact, we aim to provide valuable insights for tailored interventions aimed at enhancing the well-being and quality of life of postmenopausal women.

### Material and Methods

The study aimed to investigate the association between menopause-specific quality of life (Menol) scores and age groups among women attending the Obstetrics and Gynecology (OBG) department of a hospital. This hospital-based descriptive observational study recruited a total of 660 women between August 2022 and January 2024. Out of these, 424 women participated in the study, meeting the inclusion criteria of being between the ages of 50 and 65 years and visiting either the outpatient department (OPD) or inpatient department (IPD) of the OBG unit. Additionally, women who were more than 6 months post-hysterectomy (surgical menopause) were also included in the study.

Exclusion criteria comprised women below 50 years or above 65 years of age, those who refused to participate, and those with medical or psychiatric disorders that could potentially confound the study results. The study design allowed for a comprehensive assessment of menopause-specific quality of life across a specific age range within the postmenopausal population.

Data collection involved administering the MENQOL questionnaire to participants to assess various aspects of menopausal symptoms and their impact on quality of life. The questionnaire covered domains such as vasomotor, psychosocial, physical, and sexual symptoms, providing a holistic view of menopausal experiences. Demographic information such as age, educational level, marital status, and occupation was also collected.

In addition to assessing menopause-specific quality of life using the MENQOL questionnaire, the study also incorporated the Work Productivity and Activity Impairment (WPAI) questionnaire to evaluate productivity loss and daily activity

impairment among employed participants. The WPAI questionnaire, a validated instrument, comprises four subscales aimed at capturing various dimensions of work impairment and activity limitation.

The first subscale measures overall work impairment, which combines both absenteeism (the percentage of work time missed due to health problems) and presenteeism (the degree to which health problems affect productivity while at work). The second subscale specifically quantifies absenteeism, providing insight into the extent of work time missed due to health-related issues. The third subscale, presenteeism, assesses the impact of health problems on productivity during work hours. Finally, overall work impairment is calculated using a formula that accounts for both absenteeism and presenteeism, offering a comprehensive measure of work-related impairment.

Employed participants in the study provided data on overall work impairment using the WPAI questionnaire, allowing for an assessment of the impact of menopausal symptoms on work productivity and daily activities. By integrating both the MENQOL and WPAI questionnaires, the study aimed to capture a comprehensive understanding of the multifaceted effects of menopausal symptoms on women's quality of life and daily functioning.

Data analysis encompassed the calculation of descriptive statistics, including mean, standard deviation (SD), frequency, and proportions, to summarize both Work Productivity and Activity Impairment (WPAI) scores, assessing overall work impairment, absenteeism, and presenteeism, as well as menopause-specific quality of life (Menol) scores. Associations between Menol scores and work impairment were explored using appropriate statistical analyses such as correlation tests or regression models. Additionally, Menol scores were analyzed in association with demographic variables, particularly age groups, using one-way Analysis of Variance (ANOVA), allowing for the examination of potential differences in quality of life among different age cohorts.

### Results

Out of the total 660 patients enrolled in the study, 236 did not receive follow-up. Among the remaining 424 patients who received follow-up, 100 had undergone hysterectomy, leaving 324 classified as postmenopausal. Among those aged 50-54, no significant socioeconomic differences were found ( $p=0.23$ ). In the 55-59 age group, the  $p$ -value was not reported. The socioeconomic distribution varied, with the highest number in the lower middle class (190) and the lowest in the upper class (34). Primary education was prevalent (76,  $p=0.001^*$ ), and married women were most

common (340, p=0.027\*). Widows totaled 71. Employment status showed no significant

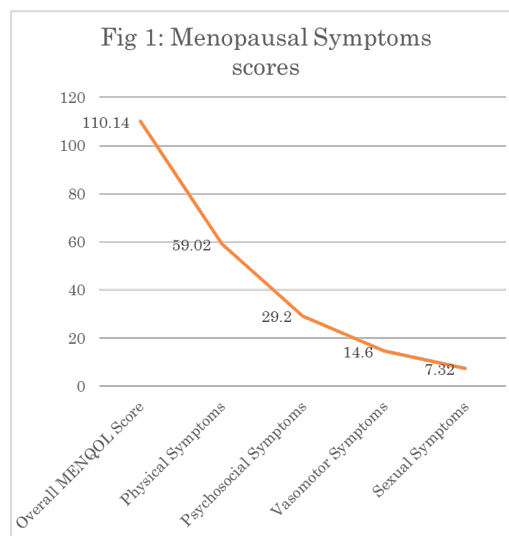
differences, with 304 housewives and 10 retired individuals.

**Table 1: Socioeconomic characteristics of the study subjects**

Socioeconomic characteristics	No of Patients	P Value#	Socioeconomic characteristics	No of Patients	P Value
50-54 years age	110	0.23	Upper class	34	0.007*
55-59	144		Upper middle	64	
60-64	127		Lower middle	190	
At the age of 65	45		Upper lower	111	
Primary Education	76	0.001*	Lower class	25	
High School	20		Married	340	0.027*
Higher secondary	4		Unmarried	13	
Graduates	0		Widow	71	
Government employee	12	0.72	#One way ANOVA P value, *P<0.05 statistically significant		
Private employee	0				
House wife	304				
Retired	10				

In present study, figure 2 displays mean scores and standard deviations (SD) of menopause-specific symptoms among postmenopausal women. Physical symptoms showed the highest mean score (59.02 ± 14.72), followed by psychosocial symptoms (29.20 ± 10.03). Vasomotor symptoms

had a mean score of 14.60 (± 7.68), while sexual symptoms scored 7.32 (± 2.01). The overall MENQOL score was 110.14 (± 34.44), indicating a significant impact on postmenopausal women's quality of life.



**Figure 1: Menopausal symptoms scores**

In our current study, hot flashes affected 50% of postmenopausal women, with 35 experiencing mild to moderate symptoms and 15 reporting severe to very severe symptoms. Cardiac symptoms were reported by 26% of participants, with 70 experiencing mild to moderate symptoms and 4 having severe to very severe symptoms. Sleep disturbances affected 45% of participants, with 45 reporting mild to moderate symptoms and 5

experiencing severe to very severe symptoms. Joint and muscle discomfort was prevalent in 9% of participants, with 17 having mild to moderate symptoms and 74 reporting severe to very severe symptoms. Other notable symptoms included depression (39%), irritability (59%), anxiety (13%), physical and mental exhaustion (20%), sexual problems (13%), bladder problems (37%), and vaginal dryness (39%).

**Table 2: Menopausal symptoms and severity on menopausal rating scale (n=424)**

Menopausal Symptoms	No Symptom (%)	Mild to Moderate (n)	Severe to Very Severe (n)	Percentage (%)
Hot Flashes	50%	35	15	50%
Cardiac Symptoms	26%	70	4	74%
Sleep Disturbances	45%	45	5	55%
Joint & Muscle Discomfort	9%	17	74	91%
Depression	39%	31	30	61%
Irritability	59%	21	20	41%
Anxiety	13%	70	17	87%
Physical & Mental Exhaustion	20%	50	30	80%
Sexual Problems	13%	42	45	87%
Bladder Problems	37%	40	23	63%
Vaginal Dryness	39%	29	32	61%

## Discussion

In our study, we explored the effects of menopause-related symptoms on postmenopausal women in hospital care. Our findings highlighted the prevalence and impact of various symptoms commonly associated with this life stage. Notably, physical symptoms like hot flashes, joint discomfort, and cardiac symptoms emerged as significant challenges during the menopausal transition.

The mean score for physical symptoms was  $59.02 \pm 14.72$ , indicating a moderate intensity and showcasing the substantial burden experienced by women grappling with these manifestations. Additionally, we observed a prevalence of psychosocial symptoms such as anxiety and exhaustion, with a mean score of  $29.2 \pm 10.03$ , underscoring their moderate impact on emotional and psychological well-being.

Furthermore, our investigation revealed the presence of vasomotor symptoms, including sleep disturbances, with a mean score of  $14.60 \pm 7.68$ , highlighting their disruptive influence on sleep patterns and overall quality of life. In contrast, sexual symptoms like decreasing sexual desire and avoiding intimacy were relatively milder, evidenced by a mean score of  $7.32 \pm 2.01$ , suggesting a lesser impact on sexual health and intimacy. Comparing our data with the findings of the study conducted by Senthilvel et al. [6], we observed striking similarities in the prevalence and impact of menopause-related symptoms. Both studies revealed that physical symptoms exhibited the highest mean scores, followed by psychosocial symptoms, vasomotor symptoms, and sexual symptoms, which consistently showed the lowest mean scores. These findings resonate with prior research by Ahsan et al. [7] and Khatoun et al. [8], underscoring the prominence of physical and psychosocial symptoms during the menopausal transition.

Moreover, our observations align with those of other study by Jayabharathi et al. [9] reported that 63% of women experienced physical symptoms, a figure closely paralleling our own findings. Similarly, Groeneveld et al. from Holland also noted the prevalence of physical symptoms among menopausal women, further corroborating our results. Additionally, Khatoun et al. [8] found that the proportion of women experiencing physical symptoms, psychosocial symptoms, vasomotor symptoms, and sexual symptoms were 69%, 58.7%, 40%, and 37.9%, respectively, mirroring the trends observed in our study cohort.

These consistent patterns across various studies lend robust support to our findings, emphasizing the global significance of physical and psychosocial symptoms during the menopausal transition. By corroborating these observations across diverse populations, our study adds further depth and validity to the existing body of knowledge surrounding menopausal symptomatology, paving the way for more targeted interventions and improved management strategies for menopausal women worldwide.

Our study findings align with previous research, revealing the frequent occurrence of physical and psychosocial symptoms among postmenopausal women, while vasomotor and sexual symptoms were less commonly reported. [10,11] This consistency underscores the robustness of our results and emphasizes the significant burden of menopause-related symptoms in this population. By illuminating the prevalence and intensity of these symptoms, our study, in conjunction with prior investigations, underscores the imperative for tailored interventions aimed at addressing the diverse domains of menopausal symptoms to enhance the overall quality of life during this transitional phase. Recognizing the profound impact of menopause-related symptoms, healthcare professionals can provide more targeted support and care, ultimately improving the well-being and

quality of life of postmenopausal women attending hospital care.

While our study provides valuable insights into menopausal symptomatology among postmenopausal women attending the hospital, it is not without limitations. Firstly, our sample may not fully represent the broader population of postmenopausal women due to its hospital-based nature, potentially limiting the generalizability of our findings. Additionally, the cross-sectional design of our study precludes causal inference and longitudinal assessment of symptom trajectories over time. Furthermore, reliance on self-report measures may introduce response bias, and the exclusion of women with certain medical or psychiatric conditions may affect the comprehensiveness of our results

### Conclusion

In conclusion, our study underscores the widespread prevalence of menopausal symptoms among postmenopausal women receiving hospital care. Commonly reported symptoms such as hot flashes, cardiac symptoms, sleep disturbances, joint and muscle discomfort, anxiety, and physical and mental exhaustion highlight the multifaceted challenges faced during menopause. The significant impact of these symptoms on women's well-being emphasizes the urgent need for healthcare professionals to address and effectively manage them.

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