



Assessment Of Quality Of Life Among Peri And Postmenopausal Indian Women: A Cross-Cultural Comparison Using The Menopause Rating Scale (MRS)

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Abstract

Background: Menopause marks the permanent cessation of menstruation and the end of a woman's reproductive capacity. It is a natural biological process, often accompanied by a variety of physical, psychological, and urogenital symptoms due to hormonal changes.

Objective: This study aims to assess the quality of life of Indian postmenopausal women and compare their menopausal symptoms with those reported in other countries.

Methods: A cross-sectional comparative study was conducted among 398 women aged 45–55 years in urban and rural areas of Varanasi district, Uttar Pradesh. Data were collected using the **Menopause Rating Scale (MRS)**, which evaluates 11 common menopausal symptoms categorized into somatic, psychological, and urogenital domains. The MRS was translated into the local language for better understanding.

Results: The most prevalent symptoms reported were muscle and joint discomfort (79.8%), depressive mood (70%), anxiety (69.4%), hot flushes (68.7%), and sleep disturbances (65.7%). Psychological symptoms were found to be the most severe, with 52.3% of women experiencing them at a high level and 11.6% at a very high level. Somatic complaints were predominantly moderate (43.7%), while urogenital symptoms were mostly low to moderate (41.0% and 36.6% respectively).

Conclusion: The findings highlight that psychological symptoms are the most distressing among postmenopausal Indian women, requiring urgent attention. Somatic and urogenital symptoms, while common, are generally moderate. A comprehensive management approach focusing on mental health, physical wellness, and reproductive health education is recommended.

Keywords: Menopause, Menopause Rating Scale, Psychological Symptoms, Somatic Complaints, Urogenital Symptoms, Quality of Life, Postmenopausal Women, India.

Introduction

Menopause represents the end of the reproductive life of women. This is the stage when menstruation stops permanently and the woman becomes unable to conceive. The average age is considered to be around 51 years. [1] It is a normal physiological process of women's life. With increasing age, human ovaries become unresponsive to gonadotropin hormones, due to which their functionality starts decreasing and sexual cycles end. In this condition, the ovaries are unable to secrete sufficient amount of progesterone and 17-estradiol, resulting in gradual atrophy of the uterus and vagina. Due to the lack of estrogen and progesterone, the secretion of FSH and LH increases, which causes many physical and mental symptoms.

The most common symptoms include hot flushes, night sweats, sleep disturbances, irritability, etc. It is estimated that about 75% of women who have reached menopause experience hot flushes. This phenomenon is often associated with an episodic increase in LH secretion. After menopause, women are also at increased risk of many diseases, such as – Osteoporosis, Ischemic heart disease, Kidney disease, In addition, with increasing age, women's physical and mental ability also declines.

The intensity and nature of menopausal symptoms depend on many factors, such as – Age, Socio-demographic profile, Educational level, Working or non-working status, The Menopause Rating Scale (MRS) is used to measure these symptoms. It is a health-related quality of life scale (HRQoL), which assesses the severity of aging symptoms in women who have attained or attaining menopause. In recent years, interest in clinical research on the health of older women has increased. In this sequence, it is very important to understand the quality of life of Indian women who have attained menopause and compare it with women of other countries.

Objective

The objective of this study is to assess the quality of life of Indian women who have attained or attaining menopause and compare it with the quality of life of women of other countries.

Material and Method

Research Design: Cross-sectional comparative study design was adopted in this study.

The study involved a random sample of 398 women aged 45-55 years. The data was collected from the majority of urban and rural areas of Uttar Pradesh's Varanasi district. After taking their consent, the women were asked to answer a questionnaire about menopausal symptoms.

Study Tool: Menopause Rating Scale - MRS

Menopause Rating Scale (MRS) was used to assess menopause-related symptoms and women's health and quality of life.

It includes a total of 11 symptoms:

1. Hot flushes/sweating
2. Cardiac problems
3. Sleep problems
4. Depressed mood
5. Irritability
6. Anxiety
7. Physical and mental exhaustion
8. Sexual problems
9. Bladder problems
10. Vaginal dryness
11. Muscle and joint discomfort

Subcategories

These 11 symptoms are classified into three subcategories:

A. Somatic complaints: Hot flushes, cardiac problems, sleep problems, muscle and joint discomfort.

B. Psychological complaints: Depression, irritability, anxiety, physical and mental exhaustion.

C. Urogenital complaints: Sexual problems, bladder problems, vaginal dryness.

Scoring System Each symptom was scored on a 0–4 scale: (0 = absent), (1 = mild), (2 = moderate), (3 = severe), (4 = very severe) (Heinemenn et al., 2003), For the Present study the MRS English version was translated into local language in order to facilitate analysis and interpretation of the result.

Maximum total score = 44 points.

For somatic complaints those who obtained scores 2 to 4 were considered to have very few symptoms, 5 to 6 were considered to have mild symptoms, 7 to 10 were considered to have moderate symptoms, 11 to 13 were considered to have severe symptoms, and 14+scoring indicate mere severity.

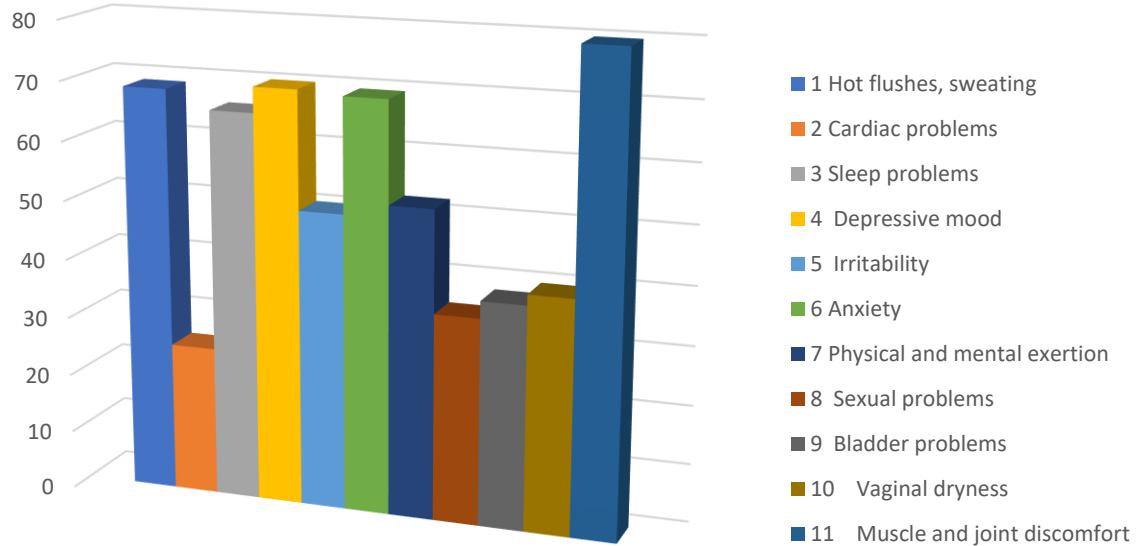
For psychological complaints those who obtained scores 1 to 2 were considered to have very few symptoms, 3 to 4 were considered to have mild symptoms, 5 to 7 were considered to have moderate symptoms, 8 to 10 were considered to have severe symptoms, and 11 to 13 were considered to have very severe symptoms.

For genital complaints, those who obtained scores 0 to 1 were considered to have very few symptoms, 2 to 3 were considered to have mild symptoms, 4 to 6 were considered to have moderate symptoms, and 7 to 8 were considered to have severe symptoms, and 9 were considered to have very high severe symptoms.

Language Adaptation

For this study, the English version of the MRS questionnaire was translated into the local language to facilitate accurate evaluation and interpretation of the results for the participants.

SI. No	Related to Menopausal Symptoms	%
1	Hot flushes, sweating	68.7
2	Cardiac problems	25.3
3	Sleep problems	65.7
4	Depressive mood	70
5	Irritability	50.2
6	Anxiety	69.4
7	Physical and mental exertion	52.3
8	Sexual problems	35.1
9	Bladder problems	38
10	Vaginal dryness	39.8
11	Muscle and joint discomfort	79.8
Table 1		

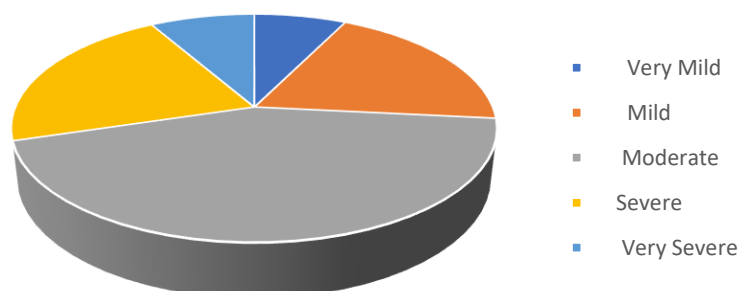


Graph-1:Menopausal Symptoms

Sl.No	Complaints	%
1	Somatic Complaints	
	• Very Mild(2-4)	7.3
	• Mild(5-6)	19.3
	• Medium(7-10)	43.7
	• Severe(11-13)	21.4
	• Very Severe(14+)	8.3
2	Psychological Complaints	
	• Very Mild(1-2)	1.0
	• Mild(3-4)	4.7
	• Medium(5-7)	30.4
	• Severe(8-10)	52.3
	• Very Severe(11-13)	11.6
3	Urogenital Complaints	
	• Very Mild(0-1)	2.5
	• Mild(2-3)	41.0
	• Medium(4-6)	36.6
	• Severe(7-8)	17.6
	• Very Severe(9)	2.3

Table 2

Graph-2:Somatic Complaints



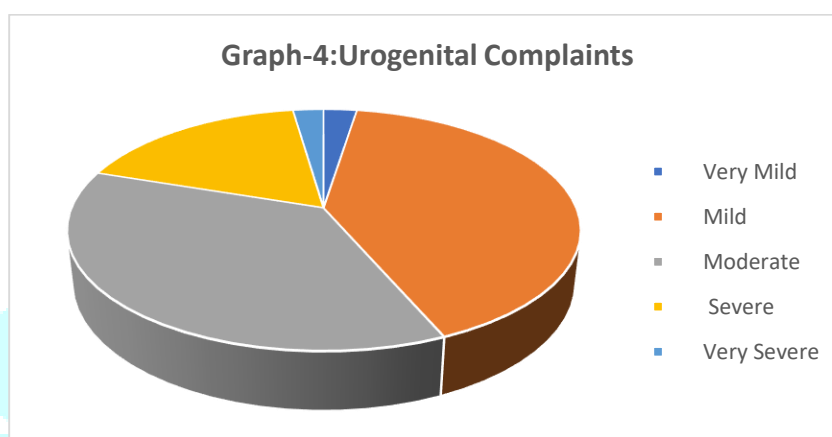
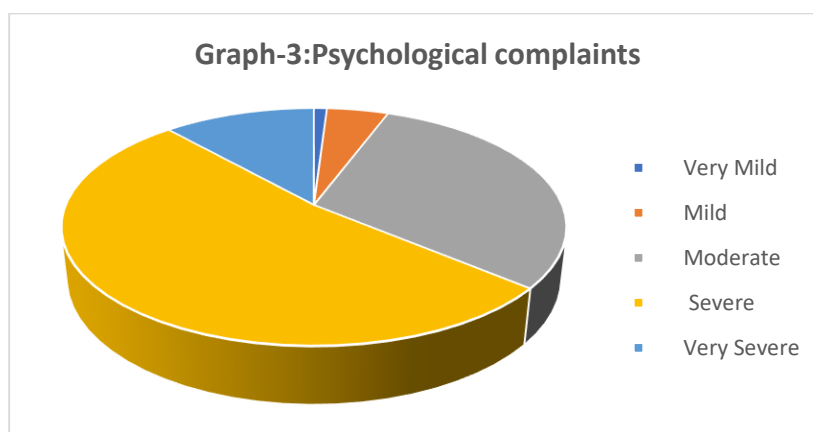


Table 1 shows that most frequent complaints were muscle and joint discomfort (79.8%), hot flushes (68.7%) and sleep problems (65.7) among given population of Peri and Postmenopausal women. During this phase psychological symptom like anxiety and depressive mood were also high (69.4%) and (70%) respectfully. Next most frequent Complaints are irritability (50.2%) and Physical and mental exertion (52.3%) Out of all vaginal dryness (39.8%), bladder Problems (38%) and Sexual Problems (35.1%) are least frequent complaints.

Results of Table 2 The distribution of menopausal symptoms across somatic, psychological, and urogenital domains revealed distinct patterns of severity. In the case of somatic complaints, a substantial proportion of respondents (43.7%) were classified under the moderate level, followed by 21.4% reporting a severe level and 19.3% reporting a mild level of problems. Only a smaller percentage of respondents experienced very mild (7.3%) or very severe (8.3%) somatic complaints. With respect to psychological complaints, the majority of respondents (52.3%) reported symptoms at a severe level, while 30.4% were categorized as moderate. Furthermore, 11.6% of respondents reported very severe psychological problems, whereas only 4.7% and 1.0% were found in the mild and very mild categories, respectively. For urogenital complaints, the highest proportion of respondents (41.0%) fell within the mild-level category, followed by 36.6% with moderate, 17.6% with severe, and 2.3% with very severe complaints, while 2.5% reported very mild levels.

Taken together, these findings suggest that psychological complaints were the most prominent and severe type of menopausal symptoms, affecting more than half of the participants at a severe or very severe level. In contrast, somatic complaints were predominantly of moderate intensity, indicating common but not extreme physical difficulties, whereas urogenital complaints were reported primarily at mild to moderate levels, suggesting that these symptoms were comparatively less severe.

Discussion

According to Manal F. Moustafa who conducted a survey in Egypt, a positive correlation exists between menopausal symptoms and quality of life. He observed that menopause causes a decrease in quality of life. [2] In my study, post-menopausal women frequently complained about joint and muscle discomfort (79.8%). This result confirms findings by Rahman A et al. [3] and a study by Chedraui P [4] in which joint and muscular discomfort was most frequently experienced (around 80%). Joint and muscle pain are

common complaints during the menopausal transition. The primary underlying mechanism is the decline in estrogen levels, which exerts a protective effect on the musculoskeletal system. Estrogen deficiency leads to increased inflammatory activity, reduction in collagen content, and loss of bone mineral density, resulting in joint stiffness, discomfort, and muscular pain. Furthermore, decreased estrogen adversely affects muscle mass and strength, while low calcium and vitamin D levels aggravate musculoskeletal symptoms. Therefore, hormonal imbalance during menopause plays a pivotal role in the development of joint and muscle pain.

Dr. Eman Elsayed Mohammed from Zagazig University, Egypt, in his survey found that the prevalence of post-menopausal symptoms is high among women from rural areas. His analysis, which says that mild bladder problems are 38.5%, coincides with the present findings. [5] This study also shows that hot flushes and sweating are about 68.7% of total menopausal symptoms, coinciding with the cross-sectional survey by Neena Chuni among Nepalese women having 69.7% of hot flushes and sweating. [6] S. Metintas observed that MRS score is higher in rural Turkey. [7] The analysis done by Syeda Fakhra Batool from Lahore, Pakistan, shows the severity of symptoms like sleeping problems (77%), hot flushes (69%), joint and muscular pain (66%), and irritability (58%) in postmenopausal women, which coincides with this study in rural India. [8]

The present study assessed menopausal symptoms across three domains: somatic, psychological, and urogenital. During menopause, women may face increased psychological challenges such as depression, anxiety, and mood swings. These issues are often linked to hormonal fluctuations and the emotional response to the end of fertility and changes in identity or life roles. Hot flushes are common somatic symptoms in menopausal women due to a decline in estrogen, which affects the hypothalamus, the body's temperature regulation center. Urogenital symptoms, such as vaginal dryness and urinary issues, also increase during menopause because reduced estrogen leads to thinning of the vaginal and urinary tract tissues, causing discomfort and increased susceptibility to infections.

Psychological complaints were most severe, with over half of respondents reporting high or very high levels, indicating significant mental health impacts such as anxiety, mood changes, and irritability. This aligns with previous studies (Avis et al., 2001; Dennerstein et al., 2000) highlighting mood disturbances as common menopausal concerns. Somatic symptoms, including muscle and joint discomfort, hot flushes, and sweating, were generally moderate. Urogenital complaints, such as vaginal dryness and bladder issues, were mostly mild to moderate, suggesting that these symptoms are less disruptive than psychological or somatic issues. Cultural factors may also contribute to underreporting of urogenital complaints.

Overall, psychological symptoms require greater clinical attention, while somatic and urogenital complaints, although prevalent, are more manageable.

Conclusion

Menopause affects women across multiple domains, with psychological symptoms being the most severe. Somatic and urogenital complaints, though common, are generally moderate and manageable. A holistic approach addressing mental health, physical well-being, and urogenital care is essential for comprehensive menopausal management.

Recommendations

1. Psychological Support: Counselling, stress management, and support groups to address anxiety, mood swings, and irritability.
2. Lifestyle Modifications: Regular exercise, balanced nutrition, and sleep hygiene to alleviate somatic symptoms and improve overall health.
3. Medical Interventions: Topical estrogen therapy or other physician-guided treatments for mild to moderate urogenital issues.

4. Education and Awareness: Programs to educate women about menopausal changes, reduce stigma, and promote early symptom reporting.

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