

ORIGINAL RESEARCH

Evaluation of menopausal symptoms in premenopausal, perimenopausal and postmenopausal females

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ABSTRACT

Background: There are many clinical symptoms associated with increasing estrogen insufficiency brought on by the menopausal transition. The present study was conducted to assess increased menopausal symptoms using menopause rating scale. **Materials & Methods:** 120 women age ranged 45- 50 years who were premenopausal (had regular periods) (Group I), perimenopausal (having irregularities more than seven days from their usual cycle) (Group II), and postmenopausal (having no more periods in the previous 12 months) (Group III) were included in the study. The 11 items that made up the Menopause Rating Scale (MRS) were broken down into three subscales: somatic (items 1–3 and 11), which assessed menopausal symptoms, such as hot flashes, heart discomfort, difficulty sleeping, and problems with muscles and joints; psychological (items 4–7, respectively), which assessed depressed mood, irritability, anxiety, and physical and mental exhaustion; and urogenital (items 8–10, respectively). The sum of all the graded items in each subscale determined the overall score for a specific person. The sum of the results on each subscale was the total MRS score. **Results:** There were 25 premenopausal, 72 perimenopausal and 23 postmenopausal women. The difference was significant ($P < 0.05$). Among group I, group II and group III, the mean somatic score was 2.7, 5.1, and 5.3 respectively. The mean psychological score was 2.9, 4.5, and 3.9. The mean urogenital score was 0.7, 1.2 and 1.4 respectively. The mean total score was 6.3, 10.8, and 10.6 respectively. The difference was significant ($P < 0.05$). **Conclusion:** Menopausal physical and mental symptoms were more common and more severe in women. A popular and practical method for evaluating women's health-related quality of life throughout the menopausal transition is the menopause rating scale.

Keywords: estrogen, mental, urogenital

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INTRODUCTION

There are many clinical symptoms associated with increasing estrogen insufficiency brought on by the menopausal transition.¹ Numerous Latin American populations have demonstrated that social, psychological, and bio-related factors impact the intensity of these symptoms, which are associated with a lower quality of life (QoL).^{2,3} In actuality, a variety of factors, such as age, menopausal status, chronic illnesses, and the sociodemographic characteristics of a particular population, such as income, education, and race, might predict the frequency and intensity of menopausal symptoms. Regarding the latter, Black women have been associated with a higher probability of suffering menopausal symptoms, especially vasomotor symptoms, at a higher severity than their Caucasian

counterparts. This has been demonstrated in both premenopausal and perimenopausal groups.⁴

A popular and useful tool for assessing women's health-related quality of life during the menopausal transition is the Menopause Rating Scale (MRS).⁵ The scale conforms to psychometric criteria and is standardized. Indian women live longer and go through menopause earlier than women in western countries.⁶ This leads to a situation where a woman has urogenital, psychological, and physical problems (symptoms of menopause) and goes through menopause for approximately one-third of her life. Depending on their location within the country, Indian women experience different menopause symptoms.⁷ The present study was conducted to assess increased menopausal symptoms using menopause rating scale.

MATERIALS & METHODS

The present study comprised of 120 women age ranged 45- 50 years. All gave their written consent to participate in the study.

Data such as name, age, etc. was recorded. Women who were premenopausal (had regular periods) (Group I), perimenopausal (having irregularities more than seven days from their usual cycle)(Group II), and postmenopausal (having no more periods in the previous 12 months) (Group III) were included in the study. Bilateral oophorectomy patients were classified as postmenopausal. The 11 items that made up the Menopause Rating Scale (MRS) were broken down into three subscales: somatic (items 1–3 and 11), which assessed menopausal symptoms, such as hot flashes, heart discomfort, difficulty sleeping, and

problems with muscles and joints; psychological (items 4–7, respectively), which assessed depressed mood, irritability, anxiety, and physical and mental exhaustion; and urogenital (items 8–10, respectively). The respondent can rate each item on a scale of 0 (not present) to 4 (1 being mild, 2 being moderate, 3 being severe, and 4 being very severe). The respondent can rate each item on a scale of 0 (not present) to 4 (1 being mild, 2 being moderate, 3 being severe, and 4 being very severe). The sum of all the graded items in each subscale determined the overall score for a specific person. The sum of the results on each subscale was the total MRS score. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I: Distribution of patients

Group	Number	P value
Group I	25	0.04
Group II	72	
Group III	23	

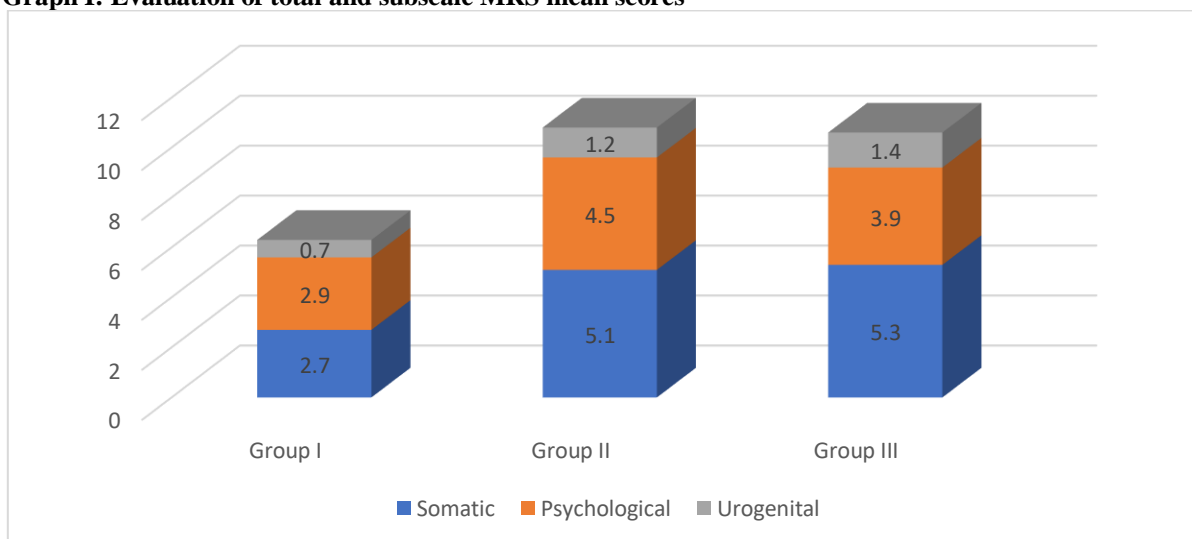
Table I shows that there were 25 premenopausal, 72 perimenopausal and 23 postmenopausal women. The difference was significant (P< 0.05).

Table II: Evaluation of total and subscale MRS mean scores

Group	Group I	Group II	Group III	P value
Somatic	2.7	5.1	5.3	0.02
Psychological	2.9	4.5	3.9	0.05
Urogenital	0.7	1.2	1.4	0.04
Total	6.3	10.8	10.6	0.05

Table II, graph I shows that among group I, group II and group III, the mean somatic score was 2.7, 5.1, and 5.3 respectively. The mean psychological score was 2.9, 4.5, and 3.9. The mean urogenital score was 0.7, 1.2 and 1.4 respectively. The mean total score was 6.3, 10.8, and 10.6 respectively. The difference was significant (P< 0.05).

Graph I: Evaluation of total and subscale MRS mean scores



DISCUSSION

The process of women's reproductive aging is dynamic and culminates in menopause, a

"physiological event that occurs to all women who reach midlife."⁸ Twelve consecutive months of amenorrhea without a medical or physiological cause

is said to have preceded menopause, the irreversible cessation of menstruation.^{9,10} Despite being a unique event, the final menstrual period (FMP) is preceded by a series of clinical changes that develop gradually and correspond to different phases. But not all women experience the phases in that order; others skip a stage completely.¹¹ The present study was conducted to assess increased menopausal symptoms using menopause rating scale.

We found that there were 25 premenopausal, 72 perimenopausal and 23 postmenopausal women. Waidyasekera H et al¹² assessed the prevalence of menopausal symptoms in a population of Sri Lankan women and the relationship with their health-related quality of life. Of the sample, 59.4% were postmenopausal and 18.4% were perimenopausal; 90% of the sample had one or more menopausal symptoms. The most prevalent menopausal symptoms were joint and muscular discomfort (74.7%), physical and mental exhaustion (53.9%), and hot flashes (39.1%). Hot flashes, sleep problems, and joint/muscular discomfort showed an increase in prevalence from the premenopausal category to the postmenopausal category ($P < 0.05$ for all). Chronic illness in the women was significantly associated with the presence of menopausal symptoms ($P < 0.01$). Women with menopausal symptoms had significantly lower ($P < 0.05$) quality-of-life scores in most of the domains of the Short Form 36 compared with women without symptoms.

We observed that among group I, group II and group III, the mean somatic score was 2.7, 5.1, and 5.3 respectively. The mean psychological score was 2.9, 4.5, and 3.9. The mean urogenital score was 0.7, 1.2 and 1.4 respectively. The mean total score was 6.3, 10.8, and 10.6 respectively. Monterrosa et al¹³ requested women between the ages of 40 and 59 to complete the Menopause Rating Scale (MRS) questionnaire so that the frequency and severity of symptoms could be compared. 578 women in all—201 Afro-Colombian and 377 non-Afro-Colombian—were polled. The average age of the entire sample was 47.9 ± 5.9 years (median 47), and there were no variations in age, parity, or use of hormone treatment (HT) between the groups under study. Due to greater somatic and psychological subscale scores, Afro-Colombian women had considerably higher levels of menopausal symptoms as measured by the overall MRS score (10.6 ± 6.7 vs. 7.5 ± 5.7 , $p = 0.0001$). Somatic symptoms, heart pain, and joint and muscle issues were more common in this group than in non-Afro-Colombian women (38.8% vs. 26.8% and 77.1% vs. 43.5%, respectively, $p < 0.05$); similarly, black women were more likely to have all items of the psychological subscale (depressive mood, irritability, anxiety, and physical exhaustion). However, non-Afro-Colombian women had higher bladder issues than black women (24.9% vs. 14.9%, $p = 0.005$). Black race was observed to increase the likelihood of presenting higher total MRS scores after controlling

for confounding variables using logistic regression analysis.

Menopausal symptoms in a postmenopausal rural population were studied by Agwu et al.¹⁴ The women' average age at the time of the interview was 49.6 ± 6.3 years. The median age at menopause was 47 years, while the mean age was 45.47 ± 5.5 years. The primary menopausal symptoms were hot flashes (36, 58.1%), sweating (25, 40.3%), frequent urination (24, 38.7%), dryness, discomfort, or discharge (22, 35.5%), difficulty concentrating (17, 27.4%), and irritability (15, 24.2%). The women's capacity to manage menopausal symptoms was negatively impacted by widowhood and empty nest syndrome, but not by educational attainment.

The limitation of the study is the small sample size.

CONCLUSION

Authors found that menopausal physical and mental symptoms were more common and more severe in women. A popular and practical method for evaluating women's health-related quality of life throughout the menopausal transition is the menopause rating scale.

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