ORIGINAL RESEARCH

Assessment of menopausal symptoms in women using menopause rating scale

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ABSTRACT
Background: A number of factors can predict the frequency and severity of menopausal symptoms, including age, menopausal state, chronic diseases, and the sociodemographic features of a given population, such as income, education, and race. The present study was conducted to assess increased menopausal symptoms using menopause rating scale. **Materials & Methods:** 150 women age ranged 45- 50 years were classified as premenopausal (women having regular menses); perimenopausal (irregularities >7 days from their normal cycle) and postmenopausal (no more menses in the last 12 months). The menopause rating scale (MRS) was used to assess menopausal symptoms. **Results:** There were 32 premenopausal, 70 perimenopausal and 48 postmenopausal women. The difference was significant (P< 0.05). Among premenopausal, perimenopausal, and postmenopausal, the mean somatic score was 2.9, 5.3, and 5.4 respectively. The mean psychological score was 2.8, 4.7, and 3.8. The mean urogenital score was 0.8, 1.3 and 1.2 respectively. The mean total score was 6.5, 11.3, and 10.4 among premenopausal, perimenopausal, and postmenopausal respectively. The difference was significant (P< 0.05). **Conclusion:** Women exhibited a higher rate and severity of menopausal somatic and psychological symptoms. menopause rating scale found to be popular and useful tool for assessing women's health-related quality of life during the menopausal transition.
Keywords: estrogen, postmenopausal, somatic score

INTRODUCTION

Clinical symptoms related with growing estrogen insufficiency that results from the menopausal transition are numerous.[1] Numerous Latin American populations have shown that the severity of these symptoms, which are linked to a lower quality of life (QoL), is influenced by social, psychological, and bio-related factors.[2] In reality, a number of factors can predict the frequency and severity of menopausal symptoms, including age, menopausal state, chronic diseases, and the sociodemographic features of a given population, such as income, education, and race.[3] Regarding the latter, compared to their Caucasian counterparts, black women have been linked to a higher likelihood of experiencing menopausal symptoms, particularly vasomotor symptoms, at a higher severity. Both perimenopausal and premenopausal populations have shown evidence of this.[4] The menopause rating scale (MRS) scale is a widely used and helpful measure for evaluating women's health-related quality of life throughout the menopausal transition. The scale is standardized and complies with psychometric standards.[5] Compared to women in western nations, Indian women experience menopause at a younger age and live longer.[6] This results in a scenario where a woman experiences menopause for about one-third of her life, along with several psychological, somatic, and urogenital issues (symptoms associated with menopause). Indian women's menopausal symptoms fluctuate depending on where in the nation they live.[7] The present study was conducted to assess increased menopausal symptoms using menopause rating scale.

MATERIALS & METHODS

The present study consisted of 150 women age ranged 45- 50 years. All gave their written consent to participate in the study. Data such as name, age, etc. was recorded. Premenopausal (women having regular menses); perimenopausal (irregularities >7 days from their normal cycle) and postmenopausal (no more menses in the last 12 months) were enrolled. Those with bilateral oophorectomy were considered as postmenopausal. The menopause rating scale (MRS)

was composed of 11 items assessing menopausal symptoms divided into three subscales- somatic: hot flushes, heart discomfort, sleeping problems and muscle and joint problems (items 1–3 and 11, respectively); psychological: depressive mood, irritability, anxiety and physical and mental exhaustion (items 4–7, respectively); urogenital: sexual problems, bladder problems and dryness of the vagina (items 8–10, respectively). Each item can be graded by the subject from 0 (not present) to 4 (1: mild; 2: moderate; 3: severe; 4: very severe). For a particular individual, the total score per each subscale was the sum of each graded item contained in that subscale. Total MRS scores was the sum of the scores obtained for each subscale. 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
Premenopausal	32	0.05
Perimenopausal	70	
Postmenopausal	48	

Table I shows that there were 32 premenopausal, 70 perimenopausal and 48 postmenopausal women. The difference was significant (P< 0.05).

Table: II Total and subscale MRS mean scores

Group	Premenopausal	Perime no pausal	Postmenopausal	P value
Somatic	2.9	5.3	5.4	0.05
Psychological	2.8	4.7	3.8	0.04
Urogenital	0.8	1.3	1.2	0.02
Total	6.5	11.3	10.4	0.03

Table II, graph I shows that among premenopausal, perimenopausal, and postmenopausal, the mean somatic score was 2.9, 5.3, and 5.4 respectively. The mean psychological score was 2.8, 4.7, and 3.8. The mean urogenital score was 0.8, 1.3 and 1.2 respectively. The mean total score was 6.5, 11.3, and 10.4 among premenopausal, perimenopausal, and postmenopausal respectively. The difference was significant (P< 0.05).

Graph: I Total and subscale MRS mean scores
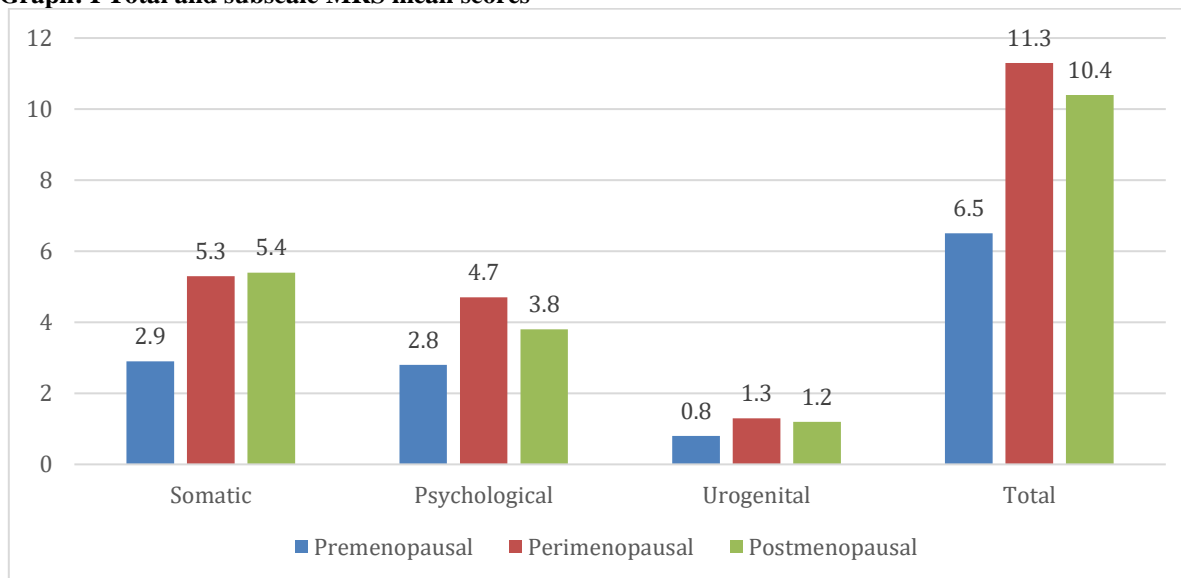
DISCUSSION
Women's reproductive aging is a dynamic process that takes place over time and ends with menopause, a common "physiological event that occurs to all women who reach midlife."[8,9] Menopause, the end of menstruation permanently, is believed to have happened after twelve consecutive months of amenorrhea that wasn't brought on by a physiological or pathological cause.[10] The final menstrual period (FMP) is a singular occurrence, but it is preceded by a sequence of clinical changes that happen gradually and correspond to distinct phases. However, not all women go through the stages in a sequential manner; some skip a stage entirely.[11,12] The present study was conducted to assess increased menopausal symptoms using menopause rating scale. We found that there were 32 premenopausal, 70 perimenopausal and 48 postmenopausal women. Agwu et al[13] examined the

menopausal symptoms in postmenopausal rural community. At the time of the interview, the average age of the ladies was 49.6+/-6.3 years. At menopause, the mean age was 45.47+/-5.5 years, whereas the median age was 47 years. Hot flushes (36, 58.1%), sweating (25, 40.3%), frequency of urination (24, 38.7%), dryness, discomfort, or discharge (22, 35.5%), inability to focus (17, 27.4%), and irritability (15, 24.2%) were the main menopausal symptoms. The empty nest syndrome and widowhood, but not educational attainment, had a detrimental effect on the ability of the women to cope with the menopausal symptoms. We found that among premenopausal, perimenopausal, and postmenopausal, the mean somatic score was 2.9, 5.3, and 5.4 respectively. The mean psychological score was 2.8, 4.7, and 3.8. The mean urogenital score was 0.8, 1.3 and 1.2 respectively. The mean total score was 6.5, 11.3, and 10.4 among premenopausal, perimenopausal, and postmenopausal respectively. Monterrosa et al[14] in their study women aged 40–59 years were asked to fill out the Menopause Rating Scale (MRS) questionnaire in order to compare symptom frequency and intensity. A total of 578 women were surveyed (201 Afro-Colombian and 377 non-Afro-Colombian). Mean age of the whole sample was 47.9 ± 5.9 years (median 47), with no differences among studied groups in terms of age, parity, and hormone therapy (HT) use. Intensity of menopausal symptoms, assessed with the total MRS score, was found to be significantly higher among Afro-Colombian women (10.6 ± 6.7 vs. 7.5 ± 5.7, $p = 0.0001$), which was due to higher somatic and psychological subscale scores. In this group, the frequency of somatic symptoms, heart discomfort and muscle and joint problems, was found to be higher than in non-Afro-Colombian women (38.8% vs. 26.8% and 77.1% vs. 43.5%, respectively, $p < 0.05$); equally, all items of the psychological subscale (depressive mood, irritability, anxiety and physical exhaustion) were also found to be higher among black women. On the other hand, compared to black women non-Afro-Colombian ones presented more bladder problems (24.9% vs. 14.9%, $p = 0.005$). After adjusting for confounding factors, logistic regression analysis determined that black race increased the risk for presenting higher total MRS scorings.

The limitation of the study is the small sample size.

CONCLUSION
Authors found that women exhibited a higher rate and severity of menopausal somatic and psychological symptoms. menopause rating scale found to be popular and useful tool for assessing women's health-related quality of life during the menopausal transition.

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