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Original Research Article

Prevalence of climacteric symptoms in menopausal and perimenopausal women

Achala Sahai Sharma^{1*}, Zareena Khan²

¹Department of Obstetrics and Gynecology, G. R. Medical College, Gwalior, Madhya Pradesh, India

²Department of Obstetrics and Gynecology, PGMO JP (District Hospital), Bhopal, Madhya Pradesh, India

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*Correspondence:

Dr. Achala Sahai Sharma,

E-mail: drachala02@gmail.com

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ABSTRACT

Background: With increasing life expectancy population of menopausal women is also rising and each woman is expected to spend almost 1/3rd of her life in this phase. Due to various factors the health issues of menopausal age group are still not completely understood and addressed. Further studies in this field are expected to enhance the understanding of the subject and improve the quality of life of elderly woman.

Methods: A cross sectional analysis was done over a period of one year, 200 women between 40 to 65 years of age not taking HRT and not having any other medical illness were recruited. The data regarding demography and 21 climacteric symptoms in Greene's Climacteric Scale was collected by interviewing the subjects. The prevalence of various menopausal symptoms and their severity were analyzed.

Results: Mean age of study group (n=200) was 46.8 years with menopausal group (n=79) 50.18 years and perimenopausal group (n=121) 44.6 years. Out of all 84% subjects were illiterate. The most prevalent and severe symptom was muscle and joint pain. There was no significant difference in the mean number of climacteric symptoms in various demographic groups and between menopausal and perimenopausal group.

Conclusions: The climacteric symptoms do not appear to decrease in number or intensity after transition from perimenopause to menopause. Differences in sensitivity, literacy, social and cultural factors etc. among elderly women may be responsible for under reporting or differences in reporting. Exploring the issues of menopausal health and training of health personnel in this field may improve awareness of these women about various menopause related health issues and thus improve their quality of life.

Keywords: Climacteric, Menopause, Perimenopausal

INTRODUCTION

Menopause is inevitable milestone in the lifetime of every woman. It is marked by depletion of ovarian follicles leading to decrease in ovarian function and ending up as permanent amenorrhoea. Due to low circulating levels of oestrogens various problems arise including vasomotor, psychological, urogenital, osteoporosis, increased risk of myocardial infarction and

stroke and many more. With increasing life expectancy women will now be spending almost 1/3rd of their lives in postmenopausal state. It is projected that elderly population over 60 years will increase to 173 million by 2026 and menopausal population to 103 million. According to IMS average age of menopause in Indian women is 47.5 years ranging from 45-55 years.¹ Thus maintaining and improving women's health during and around menopause has emerged as a major concern in

Indian scenario. This transition is barely noticeable by some women while others find it life altering. The concept of menopause related health issues was highlighted for the first time in 1981 by a report of WHO scientific group, before which virtually no data was available.² The definition related to menopause and the period prior to and following it are indistinct and inhomogeneous leading frequently to misunderstandings. There are many factors which may affect the commencement of menopause like race, socio-economic status, educational status, nicotine consumption, high fibre vegetarian diet, low BMI, type I diabetes mellitus, multigravidity and genetic factors etc.

In spite of a good knowledge acquired by us till date regarding various climacteric signs and symptoms as well as their intensity which can vary considerably among individuals, this area is so far not completely investigated and explained. There is a vast scope of developing understanding in this field and applying the knowledge in improving the quality of life of elderly women.

The aims and objective of this study are to assess the prevalence of climacteric symptoms and their severity in perimenopausal and menopausal women between 40-65 years; to educate the women and create awareness about menopausal problems to help in early recognition of climacteric symptoms, allay fear and anxiety, enable women to seek appropriate medical care and pay more attention on health and quality of life.

METHODS

In the cross-sectional analysis, done over a period of one year, 200 women between 40-65 years of age, not taking any HRT and with no history of any medical illness like diabetes, hypertension, hypothyroidism etc. were recruited. They were interviewed, demographic data regarding rural or urban, age, parity, educational status, occupation, was collected.

The climacteric symptoms and their severity were noted and analyzed using Greene's Climacteric Scale.³ This scale measures a total of 21 symptoms. Each symptom is rated by woman herself according to its severity using a 4-point rating scale from "not at all" (0), "a little" (1), "quite a bit" (2) to "extremely" (3). Symptoms 1-11 address psychological symptoms divided into a measure of anxiety 1-6 and of depression 7-11. Somatic aspects are addressed in symptoms 12-18 and vasomotor symptoms in symptom 19-20. Symptom 21 is a probe for sexual dysfunction. The total green climacteric score is the sum of all 21 scores. The prevalence of various menopausal symptoms and their severity was analyzed.

RESULTS

Table 1 shows that 60.5% (n=121) women were perimenopausal, 37.5% (n=75) were menopausal and 2.0% (n=4) had surgical menopause.

Table 1: Mean age of the patients.

Group	No. patients	Mean age in years	Std. deviation
Menopausal	79	50.18	7.236
Perimenopausal	121	44.60	5.001
Total	200	46.80	6.564

The mean age in the menopausal group was 50.18 years with SD 7.2, in perimenopausal group it was 44.60% with SD 5.0 and overall was 46.8% with SD 6.5.

Table 2: Distribution of women as per demographic groups.

Demographic information	N=200	No.	%
Educational status	Illiterate	168	84
	Primary	18	9.0
	Middle	07	3.5
	High secondary	01	0.5
	Graduate	06	3.0
Occupation	House wife	197	98.5
Area of residence	Rural	162	81.0
	Urban	138	19

According to Table 2 out of the total subjects enrolled 84% were illiterate and 16% were literate.

Table 3: Distribution of patients according to the symptoms of Greene climacteric scale (n=200).

Symptoms	No. of patients	(%)
Psychological items		
Heart beating quickly and strongly	8	4
Feeling tense or nervous	2	1
Difficulty in sleeping	111	55.5
Excitable	0	0
Attack of anxiety panic	4	2
Difficulty in concentrating	2	1
Feeling tired or lacking in energy	55	27.5
Loss of interest in most things	0	0
Feeling unhappy or depressed	2	1
Crying spells	0	0
Irritability	5	2.5
Physical items		
Feeling dizzy or faint	11	5.5
Pressure or tightness in head	5	2.5
Parts of body feel numb	4	2
Headache	101	50.5
Muscle and joint pain	163	81.5
Loss of feeling in hand of feet	0	0
Breathing Difficulties	77	38.5
Vasomotor Items		
Hot flushes	28	14
Sweat at night	25	12.5
Probe for sexual dysfunction		
Loss of interest in sex	5	2.5

Table 4a: Distribution of menopausal symptoms based on severity as per Greene climacteric scale.

Symptoms	No. of patients	Percentage
Muscle and joint pains		
0	37	18.5
1	68	34.0
2	85	42.5
3	10	5.0
Headache		
0	99	49.5
1	70	35
2	31	15.5
3	0	0
Difficulty in sleeping		
0	109	54.5
1	86	33
2	25	12.5
3	0	0
Breathing difficulty		
0	123	61.5
1	65	32.5
2	12	6
3	0	0
Feeling tired or lacking in energy		
0	145	72.5
1	46	23
2	9	4.5
3	0	0
Hot flushes		
0	172	86
1	22	11
2	5	2.5
3	1	0.5
Sweat at night		
0	175	87.5
1	22	11.0
2	3	1.5
3	0	0
Felling dizzy or faint		
0	189	94.5
1	11	5.5
2	0	0
3	0	0
Heart beating quickly or strongly		
0	192	96
1	8	4
2	0	0
3	0	0
Irritability		
0	195	97.5
1	5	2.5
2	0	0
3	0	0
Pressure or tightness in head		
0	195	97.5
1	5	2.5
2	0	0
3	0	0

Table 4b: Distribution of menopausal symptoms based on severity as per Greene climacteric scale.

Symptoms	No. of patients	Percentage
Loss of interest in sex		
0	195	97.5
1	4	2
2	0	0
3	1	0.5
Attack of anxiety/ Panic		
0	196	98
1	4	2
2	0	0
3	0	0
Parts of body feel numb		
0	196	98
1	4	2
2	0	0
3	0	0
Feeling tense or nervous		
0	198	99
1	2	1
2	0	0
3	0	0
Difficulty in concentrating		
0	198	99
1	1	0.5
2	1	0.5
3	0	0
Feeling unhappy or depressed		
0	198	99
1	2	1
2	0	0
3	0	0
Excitable	None	
Loss of interest in most things	None	
Crying spells	None	
Loss of feeling in hands or feet	None	

Table 5: Mean number of climacteric symptoms in different demographic.

Characteristics of patients	No. of patients	Mean number of symptoms	Std. deviation	P value
Age	≤45	120	4.48	3.519
	>45	80	5.18	3.434
Education	Illiterate	168	4.87	3.487
	Literate	32	4.16	3.521
Occupation	House wife	197	4.70	3.431
	Working	3	8.33	6.429
Referral	Referred	10	4.60	3.748
	Direct	190	4.76	3.490
Residence	Urban	38	5.74	4.215
	Rural	162	4.52	3.215
Any addiction	Addict	9	2.89	1.453
	Not addict	191	4.84	3.539
Groups	Menopausal	79	4.89	3.515
	Peri menopausal	121	4.67	3.491

Test applied is student test, to compare the mean number of symptoms in various groups. P value<0.05 is considered significant.

Table 6: Prevalence of various climacteric symptoms as per Greene climacteric scale among menopausal and perimenopausal study group.

Green climacterics GC Scale	Menopausal (79)	%	Perimenopausal (121)	%	Total
Heart beating quickly and strongly	4	5.1	4	3.3	8
Feeling tense or nervous	1	1.3	1	0.8	2
Difficulty in sleeping	47	59.49	64	52.89	111
Excitable	0	0.0	0	0.0	0
Attack of anxiety panic	1	1.3	3	2.5	4
Difficulty in concentrating	1	1.3	1	0.8	2
Feeling tired or lacking in energy	17	21.5	38	31.4	55
Loss of interest in most things	0	0.0	0	0.0	0
Feeling unhappy or depressed	0	0.0	2	1.7	2
Crying spells	0	0.0	0	0	0
Irritability	3	3.8	2	1.7	5
Feeling dizzy or faint	5	6.3	6	5.0	11
Pressure or tightness in head	2	2.5	3	2.5	5
Parts of body feel numb	2	2.5	2	1.7	4
Headache	36	45.6	65	53.7	101
Muscle and joint pain	68	86.1	95	78.5	163
Loss of feeling in hand of feet	0	0.0	0	0.0	0
Breathing difficulties	35	44.3	42	34.7	77
Hot flushes	12	15.2	16	13.2	28
Sweat at night	9	11.4	16	13.2	25
Loss of interest in sex	1	1.3	4	3.3	5

Most of the women 98.5% were housewives. Majority of them were rural 81% and only 19% were urban. The factors like illiteracy and non-working status of majority of our cases may be responsible for their lack of awareness and shy attitude leading to under reporting of climacteric symptoms by them.

Table 3 shows the various symptoms and their frequency of occurrence in the women in sequence as per the Greene Climacteric scale. The most prevalent symptom found was muscle and joint pain 81.50% (n=163) followed by headache in 50.0% (n=101). The least frequent symptom encountered was feeling tense and nervousness and difficulty in concentration 1.0% (n=2). None of the patients complained of “loss of interest in most things”, crying spells, excitable and loss of feelings in hands or feet. Also, hot flushes (n=28) and loss of interest in sex (n=25) were also infrequent. These observations again reflect the rural, cultural and educational background of study group. As most cases are illiterate, they may not be able to appreciate nervousness, depression, difficulty in concentration etc. And due to cultural factors, they may not have shared intimate problems like loss of interest in sex. Present cases must have failed to perceive hot flushes as a symptom and its relation to aging. Thus, the study group appears to be suffering mainly from somatic symptoms.

Table 4 shows the severity of each symptom experienced by women. With ten patients reporting Greene Climacteric scale “extreme” grade 3 and 85 patients

reporting “quite a bit” grade 2, muscle and joint pain was the most severe symptom in the study group. Out of 101 patients who had headache, 31 reported grade 2 and 70 reported grade 1 severity. Difficulty in sleeping was the third most severe symptom after muscle and joint pain and headache. Thus, somatic symptoms were perceived more severely than vasomotor and sexual symptoms.

Table 5 compares the mean number of climacteric symptoms in different demographic groups and depicts no significant difference in various groups.

Table 6 shows that all symptoms were more or less equally present in menopausal and perimenopausal women. Perception of headache was found in higher number of perimenopausal women (n=65, 53.7%) than menopausal women (n=36, 45.6%). Similarly, panic attack, feeling tired and loss of interest in sex was more prevalent in perimenopausal women than menopausal women. None of menopausal women reported feeling unhappy whereas same was reported by two perimenopausal women.

DISCUSSION

In present study the most frequent symptom found was joint and muscular pain (81.5%) followed by difficulty in sleeping (55.5%) and headache (50.5%). Shafie et al, Olaolorun and Lawoyin and Waidyasekera (2009) also found muscle and joint pain as the most common symptom (73.3%).⁴⁻⁶ In contrast in the cross-sectional

study by Kalahroudi et al, night sweat was the most common and most severe symptom and also a statistically significant difference was found between menopausal symptoms and the working status, educational level, exercise etc.⁷ Vaginal dryness and sexual symptoms were found to be least prevalent in our population. Similar observation was noted by Rahman et al.⁸ The reason could be that population being rural and illiterate must have not shared this due to embarrassment. Gupta and Ray have depicted a 2-3 times higher incidence of climacteric symptoms among rural women. In present study higher mean number of symptoms were found in urban women (5.74, SD 4.21) than in rural (4.52, SD 3.21), though the difference was not statistically significant ($p=0.054$).⁹ This could indicate a better level of perception, awareness, literacy and expression in urban population. In present study women with more than 45 years were affected with a greater number of climacteric symptoms (5.18, SD 3.43) than those with age <45 years (4.48, SD 3.51), though the difference was not significant ($p=0.16$). As far as occupation is concerned working women were affected with higher mean number of symptoms (8.33, SD 6.42) as compared to house wives (4.70, SD 3.43), but the difference was insignificant ($p=0.74$). African and Asian women reported more somatic symptoms like fatigue, headache and joint pain (Shafie et al, Olaolorun and Lawoyin, Waidyasekera et al, Kalahroudi et al).⁴⁻⁷ Unlike women from western countries in whom hot flushes and vaginal dryness were frequently reported (Mishra et al, Green et al, William et al, Liu and Eden).¹⁰⁻¹³ This could be due to awareness in western women that these symptoms are associated with menopause. There was no significant difference between the mean number of symptoms in tobacco chewers and non-chewers. We did not find any difference in the mean number of climacteric symptoms in various demographic groups and also between perimenopausal and menopausal groups in present study. This may be the depiction of the fact that symptoms do not decrease after transition from perimenopause to menopause.

CONCLUSION

Present study concludes that managing menopausal health is more than an issue of understanding aging or hormonal imbalance. Differences in reporting of symptoms among women may be indicative of differences in symptom sensitivity or a tendency to under report due to lack of education or embarrassment. There is a need to explore the area of menopausal health using various research methodologies. In the absence of a source to update their knowledge about menopausal health problems and their remedies women fail to perceive the climacteric symptom and do not seek any solution. Illiteracy and introvert behaviour further add to the burden. Rural and illiterate women do not disclose their problems and fail to link the symptoms with menopause. Thus, there is also a dire need to develop an efficient system of training the health personnel to elicit

information and impart knowledge about the climacteric symptoms to the aged women. This will go a long way in improving their quality of life.

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