

**Menopause related problems among perimenopausal women**

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Abstract: Menopause is a unique stage of female reproductive life cycle, a transition from reproductive to non reproductive stage. Menopause may be smooth experience for some women with only symptom of cessation of menstrual flow while others face one or more of the menopausal symptoms. The presence and severity of symptoms vary tremendously from woman to woman and can last from months to years during this transitional period. This study was conducted to assess the sociopersonal and health related data and menopause related problems among women. The findings show that the women are affected by menopause related problems of varying degree. Appropriate health care measure with special emphasis to life style interventions need to be initiated to enable women to live healthy and productive life at midlife.

Keywords: menopause, menopausal symptoms, women, midlife

I. INTRODUCTION

Aging is a natural process of maturation. All facts of aging are important to consider from a Women's health perspective. One of the most important of these facets is menopause- a unique stage of female reproductive life cycle, a transition from reproductive to non reproductive stage. Menopause is the permanent cessation of menstruation resulting from the loss of ovarian follicular activity [1].

In present era with increased life expectancy, women are likely to face long periods of menopause accounting to approximately a third of her life [2]. While most women traverse the menopausal transition with little difficulty, others may undergo significant stress[3]. The presence and severity of symptoms vary tremendously from woman to woman and can last from months to years during this transitional period [4]. Menopausal symptoms have significant impact on quality of life of menopausal women at different status of menopause [5].

Health issues of menopausal women place a significant challenge to public health, considering the facts that there has not been a specific health program for such women in the country in the context of the rising geriatric population. An understanding of menopausal symptoms experienced by these women is essential for designing appropriate delivery of healthcare services and to ensure easy transition to old age. Therefore the present study was aimed at assessing socio-personal and health characteristics and symptoms reported among women between 40 and 55 years of age.

II. MATERIALS AND METHODS

Cross sectional data were collected from 120 perimenopausal women belonging to a government supported self help group initiative (Kudumbasree Mission) in two panchayaths of Idukki District. Active members of the selected self help groups were identified with the help of the registers maintained at the units. The selection of the study areas was made on the basis of operational convenience. Sample size calculation was done using average prevalence of some of the

major postmenopausal symptoms affecting Indian women found from various studies [6,7,8,9]. perimenopausal women who met the inclusion criteria were identified by purposive sampling technique. The participants were selected following certain criteria: Perimenopausal women between the age group of 40-55 years with self reported good health and experiencing two or more menopause related problems for the last one month preceding data collection, Women in perimenopausal period included a) Premenopausal -Women who menstruate irregularly with for three months preceding data collection, b) Early post menopausal -Women who do not have menstruation for 1-6 years. Women who had attained natural menopause and had volunteered to participate in the study were included.

Institutional ethical committee approved the project and informed written consent was taken from the participant during the conduct of the study.

The data on socio-personal and health related variables were collected using a structured questionnaire and the Greene Climacteric Scale was used to assess the menopausal symptoms among women. The Greene Climacteric scale is a 21 item standardized tool to assess the severity of menopausal symptoms among women. Each symptom is rated by the woman herself according to its severity using a 4-point rating scale from not at all (0) to extremely (3). Item 1-11 address psychological symptoms divided into a measure of anxiety (a sum of symptoms 1-6) and of depression (a sum of symptoms 7-11). Somatic aspects are addressed in item 12-18 and vasomotor symptoms in item 19 and 20. Symptom 21 is a probe for sexual dysfunction. The total Greene climacteric score is the sum of all 21 scores [10]. For the current study the Greene climacteric scale was translated into Malayalam. This questionnaire was then back translated into English by two independent translators. Translated questionnaire was assessed by measuring test-retest reliability on 20 women and the average Spearman correlation was found to be 0.79. The questionnaire included demographic data such as age, duration of menopause, parity, marital status, educational level and employment status, BMI etc.

Statistical analysis of the collected data was performed using SPSS, version 20.0. Data were presented as frequency, percentage, mean and standard deviation (SD).

III. RESULTS

A total of 120 women ranging in age from 45 to 55 years completed the questionnaire. The mean age of perimenopausal women was 47.95 (SD 3.7) years. More than half of the women (55%) had secondary level education and belonged to Hindu religion (56.7%). One third of the subjects were employed (34%). Majority (80.8%) were not aware about consequences and management of menopause. Table 1 shows some of the demographic characteristics of the women.

Among the women participated in the study 48.3% were in the menopausal transition and 51.7% were in early post menopausal status. The mean age of menopause among 58 post menopausal women was 48 years (SD 2.16). Approximately one third (30.8%) of the participants sought medical help for menopause related problems. 66.6% of the subjects had one or more of the medical comorbidities and hyperlipidemia was found to be the most common health problem among perimenopausal women. The mean BMI among the subjects was 26.24 (SD 2.49). The health related data is shown in Table 2.

The scores of the 21 items of the Greene climacteric scale are shown in Table 3. The most common symptoms reported include muscle and joint pain (95%), parts of body feel numb (93.3%), difficulty in sleeping (86.5%), irritability (85.8%). The classical vasomotor symptoms hot flushes (46.7%) and sweating at night (50%) were comparatively less among the group. Loss of interest in sex was reported by two third (82.5%) of the subjects.

The mean total Greene score for the 21 items were 20.69 (SD 7.05). The score of the subscales and the total Greene score were presented in table 4. Somatic cluster had the highest mean score i.e., 6.54 (SD 2.93) among the four domains following psychological domain in which anxiety subcluster scored the highest mean of 6.49 with SD 3.02.

IV. DISCUSSION

Findings of the study reveal the magnitude of menopause related problems among women. The study was carried out in a representative sample of women aged 45-55 years residing in two grama panchayaths of Idukki district of Kerala. All the subjects in the study group had three or more of the menopause related problems.

The mean age menopause was 48 years in the present study which is found to be higher than the national standard. The mean age of attaining menopause among Indian women is 47.5 years [11]. A possible explanation for this may be the better socioeconomic conditions and health care facilities available in the area. The finding supports the results of study conducted by Borker et al [12] where mean age of attaining menopause among women in Kerala is found to be 48.26 years. 30.8% of women sought medical help for menopause related

problems. This may be attributed to the educational status of the group. Cross-sectional studies suggest a relationship between menopause and both hypertension and serum cholesterol [13]. Increased prevalence of such physical comorbidities among the participants support this finding.

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V. CONCLUSIONS

The current study, attempted to assess the symptomatology of menopause in perimenopausal women. It clearly states that the prevalence of menopausal symptoms is definitely high among women in the current study setting. Such studies help to identify the real problems faced by perimenopausal women so as to consider health care plans in order to improve the symptoms and quality of life of women in this facet of life. Education to public about menopause and its management, utilization of community health services with special focus to

menopause population, and organization of Menopause's clinic to deal with the unique problems of menopause might help women to lead a research studies to assess the severity of the symptoms using a standard field tested and simple scales should be done in the healthy and fruitful life at menopause. Further studies can be undertaken to determine the prevalence and magnitude of menopause related problems in different local community settings so that the influence of certain variables like genetic factors, life style factors including diet and physical activity on menopause symptom experience can be better understood

ACKNOWLEDGEMENTS

The authors acknowledge all those who contributed significantly to this work, especially the women who participated in this study.

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Short Biodata for the Authors

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Table 1:Socio personal characteristics of the subjects

	Frequency	Percentage	Mean	SD
Age			47.9750	3.78289
Education				
No formal education	2	1.7		
Primary	15	12.5		
Secondary	66	55.0		
Higher secondary	22	18.3		
Technical	1	0.8		
Occupation				
Home maker	75	65.2		
Employed	45	34.8		
Religion				
Hindu	68	56.7		
Christian	25	20.8		
Muslim	27	22.5		
Parity				
Nulliparous	11	9.2		
Parous	109	90.8		
Regular exercise habit				
Yes	6	5		
No	114	95		
Awareness on menopause				
Yes	23	19.2		
No	97	80.8		
Husband's awareness of menopausal status				
Yes	95	79.2		
No	25	20.8		

Table 2:Health related characteristics of the subjects

	Frequency	Percentage	Mean	SD
Menopausal status				
<i>Premenopausal(Menopausal transition)</i>	62	51.7		
<i>Early post menopausal</i>	58	48.3		
Age at menopause(N=58)			48	2.16
History of Post menopausal bleeding(N=58)				
<i>Yes</i>	12	20.68		
<i>No</i>	46	79.32		
Sought medical help for menopause related problems				
<i>Yes</i>	37	30.8		
<i>No</i>	83	69.2		
History of premenstrual syndrome				
<i>Yes</i>	49	40.8		
<i>No</i>	71	59.2		
Medical comorbidities(79)				
<i>Diabetes</i>	5	6.33		
<i>Diabetes,Hypertension ,Hyperlipidemia</i>	2	2.53		
<i>Diabetes,Hyperlipidemia</i>	2	2.53		
<i>Diabetes,Fracture</i>	1	1.27		
<i>Diabetes,UTI</i>	1	1.27		
<i>Hypertension</i>	7	8.86		
<i>Hypertension, Hyperlipidemia</i>	20	25.32		
<i>Hyperlipidemia</i>	28	35.44		
<i>Hyperlipidemia, Thyroid disorder</i>	1	1.27		
<i>Fracture</i>	3	3.80		
<i>Thyroid Disorder</i>	9	11.39		
BMI			26.24	2.49
20-25	53	44.17		
25-30	53	44.17		
>30	14	11.66		

Table 3:Frequency and percentage of menopausal symptoms among perimenopausal women according to Greene Climacteric Scale(N=120)

	F	%	Mean	SD
Heart beating quickly or strongly	83	69.2	.90	.71
Feeling tense or nervous	88	73.3	1.11	.86
Difficulty in sleeping	104	86.5	1.75	.88
Excitable	99	82.5	1.24	.79
Attacks of anxiety, panic	88	73.3	1.10	.85
Difficulty in concentrating	39	32.5	.38	.59
Feeling tired or lacking in energy	94	78.3	1.06	.74
Loss of interest in most things	31	25.8	.34	.65
Feeling unhappy or depressed	102	85	1.18	.69
Crying spells	95	79.2	.90	.56
Irritability	103	85.8	1.35	.76
Feeling dizzy or faint	31	25.8	.29	.52
Pressure or tightness in head	56	46.7	.55	.64
Parts of body feel numb	112	93.3	1.40	.64
Headaches	89	74.2	1.35	.00
Muscle and joint pains	104	95	2.02	.80
Loss of feeling in hands or feet	21	17.5	.17	.38
Breathing difficulties	68	56.7	.75	.74
Hot flushes	56	46.7	.78	0.94
Sweating at night	60	50	.75	0.88
Loss of interest in sex	99	82.5	1.28	0.84

Table 4:Mean score of menopausal symptom clusters among perimenopausal women (N=120)

Menopausal symptom cluster	Mean	SD
Psychological cluster(10 items)	11.32	4.66
Anxiety subcluster(6 items)	6.49	3.02
Depression subcluster (7 items)	4.83	2.26
Somatic cluster (7 items)	6.54	2.93
Vasomotor cluster(2 items)	1.54	1.74
Sexual dysfunction(1 item)	1.28	0.84
Total	20.69	7.05