



A CROSS SECTIONAL STUDY ON SYMPTOMS OF PERIMENOPAUSAL WOMEN PRESENTING TO DEPARTMENT GYNAECOLOGY OF A TERTIARY CARE HOSPITAL IN SECUNDRABAD.

Dr Kaza Sai Priyanka

Resident Medical Officer, Parvathi Hospital of Maternity and Gynecology care, near Secunderabad club, Secunderabad-500009.

Dr Jayaraj R Mhetri*

Assistant Professor Department Of Community Medicine SNMC, Bagalkot.
*Corresponding Author

ABSTRACT

Perimenopausal age group women experience the menopausal symptoms which can be troublesome and is a cause for concern as many women are unaware of certain menopausal symptoms. The objective of the present study was assessment of symptoms in women belonging to perimenopausal age group. The present study is a cross-sectional study done to assess the menopausal symptoms using menopause rating scale (MRS). In the present study majority of the participants belonged to the age group of 46-50 years 92% of the study participants were married 52% had completed their education till high school. Majority of the participants belonged to class 3 of BG Prasad socio economic group. In the present study 60 % of the patients experienced hot flushes, 22 % of the patients experienced chest discomfort, 72 % of the patients experienced sleep problems, 25 % of the patients experienced depressive mood, 54 % of the patients experienced irritability, 68 % of the patients experienced anxious feelings, 78 % of the patients experienced physical and mental exhaustion, 87% of the patients experienced muscular and joint pain, 20 % of the patients experienced sexual problems, 19 % of the patient's had bladder problems, 37 % of the patients experienced vaginal dryness. The present study showed that the joint and muscular discomfort, depressive mood, heart discomfort and physical and mental exhaustion and hot flushes were the most prevalent symptoms of the perimenopausal age group women. A large population of the Indian women make up the perimenopausal age group. The mental and psychological need of the women in this age group in addition to the physical aspect of health needs to be emphasized on. Integrated approach is needed to improve the health status of this age group.

KEYWORDS : Perimenopausal women, Menopausal symptoms, Menopausal Rating Scale

INTRODUCTION

Menopause occurs when there is complete cessation of ovarian follicular activity and is defined as complete termination of menstrual cycle for at least twelve months or more. The etymology of word "Menopause" is derived from the Greek language, which translates to "monthly pause" from words "meno" (month) and "pauis" (pause). Women in the present times live longer as the result of the advancements of medicine and improved quality of medical care. As the consequence of this, women now live a substantial part of their life in state of menopause. Menopause symptoms, can affect everyday life, even though they are part of normal physiological process some of the symptoms can be severe and can cause concern amongst many women who are unaware of symptoms of menopause.¹

The estrogen levels decrease as the woman approaches the menopausal age and the symptoms of menopause are caused by this mechanism, women in perimenopausal phase of life also experience these symptoms. Women can attain menopause in range of ages from 40-65 years. This is accompanied by symptoms which include Vasomotor symptoms, urogenital, psychosomatic, psychological as well as sexual dysfunction symptoms. A large population of perimenopausal age group women experience these. Due to long term estrogen deficiency the post-menopausal women suffer from osteoporosis and cardiovascular changes.^{1,2} Indian Menopause Society (IMS) states that the average age of menopause is 47.5 years, whereas the mean age of menopause in western part of the world is 51 years. Therefore, in the Indian health system emphasis and priority needs to be given on the menopausal health of women.³ In the present study the main objective is to evaluate the symptoms with which the women of perimenopausal age group present to the health care setting.

MATERIAL AND METHODS

STUDY DESIGN. The present study is a hospital based observational cross sectional study

STUDY POPULATION consisted of Women between the age of 40-65 years attending the OPD or IPD of Department of Gynecology of the tertiary hospital in Secunderabad, who consented for the study were included in the study.

SAMPLE SIZE – to calculate the sample size OPEN EPI 2.3.1 software was used and the prevalence of hot flushes was considered to be 53.3% as reported by Fareha Khatoun et al¹, confidence limit was considered to be 10% and confidence level of 95% was taken and the

sample size was calculated to be 96 which was rounded off to 100. A total of 100 women in age group if 40-65 years were considered for the study

The exclusion criteria for the study subjects were women with medical conditions such as hypertension, diabetes mellitus, heart disease, cancer, history of drug or alcohol abuse, on hormone replacement therapy, Pregnant and breast-feeding women if any were not included in the study.

STUDY TOOL

Menopausal rating scale(MRS) questionnaire is a self-administered instrument which is a validated scale and has been used in many clinical and epidemiological studies, this scale was used to assess the symptoms of menopause.⁵ the questionnaire has 11 items and is divided into three sub scales:

Somatic symptoms which include hot flushes, heart discomfort/palpitation, sleeping problems and muscle and joint problems.

Psychological symptoms - depressive mood, irritability, anxiety and physical and mental exhaustion.

Urogenital symptoms - sexual problems, bladder problems and dryness of the vagina.

Each of the 11 symptoms are scored on Likert scale of "0" (no complaints) to "4" (very severe symptoms). Socio demographic data which included age, religion, marital status, educational level, occupation and average household income was collected.

informed consent was taken from the study participants and the women were explained about the study, study participants were interviewed by a trained interviewer about the menopausal symptoms, it was made sure that the women were seated in a comfortable surroundings. Confidentiality was maintained at all times of the study.

STATISTICAL ANALYSIS

The data was entered in MS excel 2016 and analysis was done using open epi 2.3.1 Statistical analysis was done using the Chi square test. P value of less than 0.05 was considered statistically significant. The results were presented in form of proportions and percentages and represented in form of tables.

Table 1 showing the sociodemographic details of the patients

	NUMBER OF PATIENTS	PERCENTAGE
AGE AT MENOPAUSE		
40-45 years	28	28%
46-50 years	40	40%
51-55 years	22	22%
56-60 years	10	10%
Total	100	100%
MARITAL STATUS		
Married	92	92%
Unmarried	0	0
Divorced	0	0
widow	8	8%
Total	100	100%
EDUCATION LEVEL		
Uneducated	8	8%
Primary	14	14%
High school	52	52%
Graduate	23	23%
Post graduate	3	3%
Total	100	100%
SOCIO ECONOMIC CLASS		
Class 1	18	18%
Class 2	16	16%
Class 3	26	26%
Class 4	24	24%
Class 5	16	16%
Total	100	100%

Table No 2 Showing Frequency Of Menopausal Symptoms Assessed By Menopausal Rating Scale.

SYMPTOMS	NO OF PATIENTS	MILD	MODERATE	SEVERE	VERY SEVERE
HOT FLUSHES	60	32(55.1%)	21(35%)	4 (6.6%)	2(3.3%)
CHEST DISCOMFORT	22	12(54.6%)	8(36.3%)	2(11.1%)	0
SLEEP PROBLEMS	72	36(50%)	15(21%)	12(16.6%)	9(12.4%)
DEPRESSIVE MOOD	25	10(40%)	8(32%)	4(16%)	3(12%)
IRRITABILITY	54	8(14.8%)	32(59.4%)	7(12.9%)	7(12.9%)
ANXIOUS FEELING	68	22(32.5%)	20(29.4%)	12(17.6%)	14(20.5%)
PHYSICAL AND MENTAL EXHAUSTION	78	11(14.30%)	35(44.8%)	17(21.7%)	15(19.2%)
MUSCULAR AND JOINT PAIN	87	22(25.2%)	21(24.4%)	24(27.5%)	20(22.9%)
SEXUAL PROBLEMS	20	7(35%)	10(50%)	1(5%)	2(10%)
BLADDER PROBLEMS	19	10(52.6%)	5(26.3%)	3(15.7%)	1(5.4%)
VAGINAL DRYNESS	37	12 (32.5%)	15(40.5%)	4(10.8%)	6(16.2%)

RESULTS

In the present study majority of the participants belonged to the age group of 46-50 years which made up of 40%, 28% of the study participants belonged to 40-45 years, 22% of the participants belonged to 51-55 years and least number of participants i.e. 10% belonged to 56-60 years. 92% of the study participants were married and 8% of the women were widowed, majority of the women i.e. 52% had completed their education till high school, followed by graduates who made up 23% of the study participants and post graduates were only 3% in the present study. Majority of the participants belonged to class 3 of BG Prasad socio economic group 23% belonged to class 3, 24% belonged to class 4, 18% belonged to class 1, and 16% belonged to class 5. In the present study 60% of the patients experienced hot flushes out of which 55.1% had mild symptoms, 35% had moderate and 6.6% had severe and only 3.3% had very severe symptoms.

In the present study 22% of the patients experienced chest discomfort out of which 54.6% had mild symptoms, 36.3% had moderate and 11.1% had severe and none of them had very severe symptoms. In the present study 72% of the patients experienced sleep problems out of which 50% had mild symptoms, 21% had moderate and 16.6% had severe and only 12.4% had very severe symptoms. In the present study 25% of the patients experienced depressive mood out of which 40% had mild symptoms, 32% had moderate and 16% had severe and only 12% had very severe symptoms. In the present study 54% of the patients experienced irritability out of which 14.8% had mild symptoms, 59.4% had moderate and 12.9% had severe and only 12.9% had very severe symptoms.

In the present study 68% of the patients experienced anxious feelings or were anxious out of which 32.5% had mild symptoms, 29.4% had moderate and 17.6% had severe and only 20.5% had very severe symptoms. In the present study 78% of the patients experienced physical and mental exhaustion out of which 14.30% had mild symptoms, 44.8% had moderate and 21.7% had severe and only 19.2% had very severe symptoms. 87% of the patients experienced muscular and joint pain, 35% had mild symptoms 50% had moderate and 10% had very severe and only 5% had severe symptoms. In the present study 20% of the patients experienced sexual problems out of which 35% had mild symptoms, 50% had moderate and 5% had severe and only 10% had very severe symptoms.

In the present study 19% of the patient's bladder problems out of which 52.6% had mild symptoms, 26.3% had moderate and 15.7% had severe and only 5.4% had very severe symptoms. In the present study 37% of the patients experienced vaginal dryness out of which 32.5% had mild symptoms, 40.5% had moderate and 10.8% had severe and only 16.2% had very severe symptoms.

DISCUSSION

The mean age of menopause in the present study was 46.45±6.24 years, the mean age of menopause was lower in our study when we compared our result to the study by Fareha Khatoun⁴ where the mean age at menopause was 50.33 years+5.26 years. The western studies concluded that the mean age of menopause to be around 51.14+2.11 years.⁶ The Indian menopause society has stated that the average age of menopause of Indian women over all is around 47.5 years, our studies had lower average age of menopause.³

Few other studies showed the results of mean age of menopause age to be ranging between 49.4 to 51.1 years. The cross sectional studies conducted in Thailand found the mean age of menopause to be 48.7 years and 49.1 years was the mean age of menopause in Singapore and many other studies on Asian women also show similar age of menopause.^{5,7-10} In the present study Majority of the participants belonged to class 3 of B G Prasad socio economic group which made up 26% of the total study population, it was followed by 24% of class 4, 18% belonged to class 1. Many studies indicate that the menopausal symptoms are inversely related with educational level.¹¹⁻¹³ Lee et al, found that there was a relation between the income and the educational level and lower income groups could be one of the risk factors for increased severity of the menopausal symptoms.¹⁴ Contradicting results were found by the studies done by Joseph et al, they found that educated women were having more menopausal symptoms.¹⁵

In the present study the most prevalent symptoms was joint and muscle pain, which was 87% the most prevalent menopausal symptom in a study by Fareha Khatoun et al⁴ was joint and muscular pain. This finding of our study was consistent with many other studies. In other studies, by Cheng et al and Hafiz et al it was found that joint and muscular pain was the major symptoms^{16,17}. Rahman et al⁵ also found that Joint and muscular pain was the most prevalent symptom in a study by them. Hot flushes were experienced by 60% of the patients in the present study, out of which 55.1% had mild symptoms, 35% had moderate and 6.6% had severe and only 3.3% had very severe symptoms. In a study by Rahman et al 41.6% of women had hot flushes and night sweats⁵

In a study done by Fareha Khatoun⁴ sweating and night sweats were found in 53% of respondents. The findings in above studies were lower than our study. One of the study from Turkey by Yanikkerem et al found that hot flushes was experienced by 79.6% of study participants⁸, which was higher than our study. In the present study, 72% of the patients had some form of sleep problems, 25% of the patients experienced depressive mood, 54% of the patients experienced

irritability ,68% of the patients experienced anxious feelings ,78 % of the patients experienced physical and mental exhaustion ,20 % of the patients experienced sexual problems ,19 % of the patient's bladder problems ,37 % of the patients experienced vaginal dryness. In a study by Pal A et al, the prevalence of physical and mental exhaustion was found to be much higher (86%).¹⁹ than our study. The urogenital problems like sexual problems (20%) and dryness of vagina were found to be less prevalent and if present then the symptoms were mild. In study by Avanie pal et al bladder problem was reported by 56% of study population and vaginal dryness was 53.3%, which was much more prevalent than the current study.¹⁹

The Depressive mood was reported by 70% of participants in study by Fareha Khatoon¹, physical and mental exhaustion was seen in 60% of the study participants, Heart discomfort was seen in 60.3% and 56% of the participants noted that they had sleep problems. Rahman et al² also found similar results when looking at physical and mental exhaustion which was 67% and sleep problem was reported by 52% , however depressive mood was seen in 32% and heart discomfort was seen in 18% .⁵ the reason for this disparity in the menopausal symptoms prevalence is perhaps due to the role played by lifestyle, cultures, traditions .¹⁸ It was noteworthy to observe that the common and predominant symptoms in all the studies was depressive symptoms , anxious feeling , joint an muscle pain , this was observed in all the studies . Therefore, it justifies the need for greater emphasis that needs to be given on the mental and emotion health of the women belonging to the perimenopausal age group.

CONCLUSION

The present study showed that the joint and muscular discomfort, depressive mood, heart discomfort and physical and mental exhaustion and hot flushes were the most prevalent symptoms of the perimenopausal age group women. A large population of the Indian women make up the perimenopausal age group. There is a lot of emphasis on improvement of health of reproductive age group women, perimenopausal population need the same amount of care. The mental and psychological need of the women in this age group in addition to the physical aspect of health needs to be emphasized on. Integrated approach is needed to improve the health status of this age group.

Conflict of Interest - None

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REFERENCES

1. Sireger MF. Perimenopausal and postmenopausal complains in Paramedics assessed by Menopause rating scale in Indonesia. IOSR-JDMS. 2014;13:38-42.
2. Geetha R, Parida L. Prevalence of menopausal problems and the strategies adopted by women. Maharashtra (India). IJSR. 2015;4:1-6.
3. Unni J. Third consensus meeting of Indian Menopause Society (2008): A summary. J Midlife Health. 2010;1(1):43-7.
4. Khatoon F, Sinha P, Shahid S, Gupta U. Assessment of menopausal symptoms using modified menopause rating scale (MRS) in women of Northern India. Int J Reprod Contracept Obstet Gynecol. 2018;7(3):947-51.
5. Rahman SASA, Zainudin SR, Mun VLK. Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among middle age women in Kuching, Sarawak, Malaysia. Asia Pac Fam Med. 2010 Feb;9(1):5.
6. World Health Organisation (WHO). Scientific Group on Research on the Menopause. Geneva: WHO. 1990:866.
7. Peeyanjarassri K, Cheewadhanaraks S, Hubbard M, Zoa Manga R, Manocha R, Eden J. Menopausal symptoms in a hospital-based sample of women in southern Thailand. Climacteric. 2006 Feb;9(1):23-9.
8. Pan HA, Wu MH, Hsu CC, Yao BL, Huang KE. The Perception of Menopause among women in Taiwan. Maturitas. 2002;41(4):269-74.
9. Boulet MJ, Oddens BJ, Leher P, Vemer HM, Visser A. Climacteric and menopause in seven South-east Asian countries. Maturitas. 1994 Oct;19(3):157-76.
10. Harvay C, Bee HT, Chia CA, Ee Mc, Yap SC, Seang MS. The prevalence of menopausal symptoms in a community in Singapore. Maturitas. 2002;41:272-82.
11. Gold EB, Colvin A, Avis N, Bromberger J, Greendale GA, Powell L, Sternfeld B, Matthews K. Longitudinal analysis of the association between vasomotor symptoms and race/ethnicity across the menopausal transition: study of women's health across the nation. Am J Public Health. 2006 Jul;96(7):1226-35.
12. Gold EB, Sternfeld B, Kelsey JL, Brown C, Mouton C, Reame N, Salamone L, Stellato R. Relation of demographic and lifestyle factors to symptoms in a multi-racial/ethnic population of women 40-55 years of age. Am J Epidemiol. 2000 Sep 1;152(5):463-73.
13. Sternfeld B, Quesenberry C, Hussion G. Habitual physical activity and menopausal symptoms: a case control study. Journal of women's health. 1999;8(1):115-123.
14. Lee Y, Kim H. Relationship between menopausal symptoms, depression, and exercise in middle aged women. Int J Nurs Studies. 2008;45:1816-22.
15. Joseph N, Nagaraj K, Saralaya V, Nellyyam I, Rao PJ. Assessment of menopausal symptoms among women attending various outreach clinics in South Canara District of India. J Mid-life Health. 2014 Apr;5(2):84-90.
16. Cheng MH, Wang SJ, Wang PH, Fuh JL. Attitudes towards menopause among middle aged women: a community survey in an island of Taiwan. Maturitas. 2005;52:348-55.
17. Hafiz I, Liu J, Eden J. A quantitative analysis of the menopause experience o Indian women living in Sydney. Aust N Z J Obstet Gynaecol. 2007;47:329- 34.
18. Yanikkerem E, Koltan SO, Tamay AG, Dikayak S. Relationship between women's attitude towards menopause and quality of life. Climacteric. 2012;15:552-62.
19. Pal A, Hande D, Khatri S. Assessment of menopausal symptoms in perimenopause and post menopause women above 40 years in rural area Maharashtra (India). Int J Healthcare Biomed Res. 2013;1(3):166- 74.