

## Assessment of Awareness and Knowledge of Psychosomatic & Urogenital Symptoms and Non-Hormonal Treatment in Indian Postmenopausal Women

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### Abstract

**Objective:** Assessment of awareness and knowledge of psychosomatic & urogenital symptoms in Indian postmenopausal women and to assess the use of HRT and other non-hormonal treatments for the post-menopausal symptoms.

**Methods:** Prospective observational study in which menopausal psychosomatic and urogenital symptoms were assessed using Modified Menopause Rating Scale (MRS). The questionnaire was interviewed face to face in the language they understood by trained professionals. They were explained the various somatic, the psychosexual and urogenital symptoms and women were asked whether or not they had experienced these symptoms and their responses were recorded. Each of the symptoms contain a scoring scale from "0" (no complaints) to "4" (very severe symptoms). Counselling and benefits of non-hormonal methods were explained in detail. Women were followed-up again after 6 weeks for reassessment of symptoms using the same Modified MRS SCALE.

**Results:** The mean age of menopause in this study was 50-55 years. Majority of them were married (70%), illiterate (50%), belongs to lowerclass of socioeconomic status (71%). The most prevalent menopausal symptoms for all women were joint and muscular discomfort - 210(80.76%), irritability -189(72.69%), physical problems /mental exhaustion -182(70%). In the women taking treatment, there was significant improvement in symptoms like hot flushes, physical and mental exhaustion and joint and muscular pain.

**Conclusion:** Women when present with such problems, need acknowledgement, comprehensive assessment and adequate support by family members. In the women taking treatment, there was significant improvement in symptoms like hot flushes, physical and mental exhaustion and joint and muscular pain. They can improve their quality of life by adopting nonpharmacological practices.

**Keywords:** SWAN (Study of Women's Health Across the Nation); Penn Ovarian Ageing

## Study (POAS) And MEPI (Menopausal Epidemiology Study), Modified Menopause Rating Scale (MRS)

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### Introduction

Menopause is a physiologic event in all women who reach midlife. The menopausal woman has profound reduction in estrogen production which is associated with many symptoms like hot flushes, night sweats, insomnia, vaginal dryness, muscle and joint pains, palpitation, depressed mood, osteoporosis etc.

The WHO defines menopause as the cessation of menses for a period of one year (natural menopause) or the surgical removal of the uterus along with or without ovaries (surgical menopause). Menopause can be a dramatic event in a woman's life that is as important as childbirth and puberty. [1]

However, it is rarely accorded the same significance especially in Indian culture since it is considered a natural part of ageing and therefore not exactly a cause for concern or celebration. There have been numerous western studies including SWAN (study of women's health across the nation); Penn ovarian ageing study (POAS) and MEPI (menopausal epidemiology study) that have tried to assess the impact of menopause on a woman's health. [2]

In India, the data's relatively sparse and consists of only a few large population-based studies. The years immediately following menopause are marked by several changes that are immediately apparent such as vasomotor, dermatological and sexual. Serious health issues are uncommon in early phase of menopause. The final phase is late menopause which lasts till death and is marked by debilitating conditions like

osteoporosis and occasionally malignancies. These changes however are also related to ageing itself and both are inextricably linked. [3, 4]

Menopause is associated with multiple problems – physical, urogenital, psychological and psychosocial. Studies reveal that hot flushes, osteoporosis, skin problems, somatic complaints and urogenital problems are some of the physical problems of menopause. Physical problems may also be associated with certain psychological problems such as anxiety, depression and cognitive disturbances. [5, 6]

During menopause some women may experience neglect by their husband and family and change in their role within the house. These problems may aggravate any psychological or sexual difficulties already being experienced such as decreased frequency of sex, a lack of interest, dyspareunia. Furthermore, negative attitude towards menopause conflicts between partners, lifestyle factors and cultural taboos can also aggravate the psychosexual problems. Bio- psychosocial problems do not stand alone – they are all interrelated, with one impacting on another. [7, 8]

When women present with such problems, they need acknowledgement, comprehensive assessment and adequate support by family members. They can improve their quality of life by adopting nonpharmacological practices.

### Materials and Methods

This was a Prospective observational study conducted at tertiary care center over a period of 6 months from March 2021 to

august 2021.

- All postmenopausal women presenting to obstetrics and gynecology OPD with psychosomatic and urogenital symptoms were included in the study.
- Menopausal psychosomatic and urogenital symptoms were assessed using

#### Modified Menopause Rating Scale (MRS).[9]

- It is a questionnaire-based study for assessing the severity of menopausal symptoms.
- The MRS was composed of 11 items and is divided into three sub scales
- **Somatic:** hot flushes,
- **Psychological:** depressive mood, irritability, anxiety and physical and mental exhaustion.
- **Urogenital:** sexual problems, bladder problems and dryness of the vagina.
- The questionnaire was interviewed face to face in the language they understood by trained professionals. They were explained the various somatic, the psychosexual and urogenital symptoms and women were asked whether or not they had experienced these symptoms and their responses were recorded.
- Each of the symptoms contain a scoring scale from "0" (no complaints) to "4" (very severe symptoms).
- Counselling and benefits of non-hormonal methods like counselling, lifestyle modifications, calcium,

antioxidants, vitamin D, and vitamin E supplements were explained in detail. Women were followed-up again after 6 weeks for reassessment of symptoms using the same Modified MRS Scale.

- Other demographic data like age, religion, marital status, family structure, educational level, occupation and average household income were also collected.

#### Inclusion criteria:

- All the post-menopausal women attending the obstetrics and gynecology OPD with psychosomatic and urogenital symptoms during the study period
- Women who had given the sleeping problems and heart disease for the study.

#### Exclusion criteria:

- Women with medical conditions such as hypertension, diabetes mellites, heart disease, cancer, history of drug or alcohol abuse,
- Women on hormone replacement therapy.
- Women needs immediate medical or surgical intervention.
- Women is not willing to participate.

All the data was summarized by using Microsoft Excel 2007 and SPSS version 17, followed by statistical calculations were done by performing Chi square test. A probability value (p value) less than 0.05 was considered statistically significant.

#### Observation Chart

**Table 1: Age at menopause (N=256)**

Age At Menopause	No. Of Patients	%
40-44	54	21
45-49	61	24
50-54	85	33.3
55-59	30	11.6
60-65	26	10

**Table 2: Marital status (N=256)**

Marital Status	No. Of Patients	%
Married	179	70
Widow	74	29
Divorced	3	1

**Table 3: Distribution of cases according to education (N=256)**

Education Level	No. Of Patients	%
Uneducated	127	50
Primary	82	32
Middle	17	6.6
Higher Secondary	10	4
Graduate	9	4
Post Graduate	11	4

**Table 4: Distribution of cases according to socioeconomic status**

Socioeconomic	No. Of Patients	%
Lower	183	71
Middle	44	17.3
Upper	29	11

**Table 5: Frequency of menopausal symptoms assessed by mrs**

Menopausal Symptoms	No. Of Patients	Mild	Moderate	Severe	Very Severe
Hot Flashes /Sweating	144(55.38%)	66 (45.6%)	42(29.3%)	36(25%)	0
Heart Discomfort	126(48.46%)	73(57.4%)	34(27%)	14(11.04%)	5(4.41%)
Sleep Problems	152(58.46%)	107(70.2%)	20(13%)	19(12.5%)	6(4.1%)
Depressive Symptoms	163(62.69%)	22(13.3%)	131(80.4%)	9(5.7%)	1(0.4%)
Irritability	189(72.69%)	129 (68%)	21(11.4%)	35(18.5%)	3(1.42%)
Anxiety	140(53.84%)	65 (46.2%)	60(42.9%)	11(8.26%)	3(2.47%)
Physical Problems /Mental Exhaustion	182(70%)	71(38.8%)	70(38.3%)	33(18.3%)	8(4.4%)
Sexual Problems	138(53.07%)	97(70%)	18(13.3%)	21(15%)	2(1.6%)
Bladder Problems	135(51.92%)	107(79%)	17(12.8%)	10(7.6%)	0
Vaginal Dryness	180(69.23%)	140(78%)	26(14.8%)	13(7.24%)	5(2.8%)
Joint And Muscular Discomfort	210(80.76%)	23 (11.11%)	17(8.04%)	160(76.6%)	9(4.21%)

**Table 6: Improvement of menopausal symptoms after 4 weeks**

Symptoms	Distribution	Hrt N (%)	Improvement	Non-Hrt N (%)	Improvement	P Value
Hot Flashes	144 (55.38%)	120	100	24	10	0.0001
Heart Discomfort	126 (48.46%)	86	50	40	13	0.0128
Sleep Problems	152 (58.46%)	97	43	55	28	0.5405
Depressive Symptoms	163 (62.69%)	109	78	54	32	0.1614
Irritability	189 (72.69%)	96	65	93	43	0.0046
Anxiety	140 (53.84%)	103	76	37	15	0.0006
Physical And Mental Exhaustion	182 (70%)	112	89	70	31	0.0001
Sexual Problems	138 (53.07%)	92	64	46	18	0.0012
Bladder Problems	135 (51.92%)	90	57	45	14	0.0008
Vaginal Dryness	180(69.23%)	147	105	33	13	0.0009
Joint And Muscular Pain	210 (80.76%)	122	86	88	40	0.0003

## Results

Total 260 patients completed the study. The mean age of menopause in this study was -50-55 years. Majority of them were: –married (70%), illiterate (50%), belongs to lowerclass of socioeconomic status (71%). The most prevalent menopausal symptoms for all women were

- Joint and muscular discomfort - 210(80.76%)
- Irritability -189(72.69%)
- Physical problems /mental exhaustion - 182(70%)
- Vaginal dryness-180(69.23%)
- Depressive symptoms -163(62.69%)
- Sleep problems -152(58.46%)
- Hot flushes /sweating -144(55.38%)
- Anxiety -140(53.84%)

- Sexual problems -138(53.07%)
- Bladder problems -135(51.92%)
- Heart discomfort -126(48.46%)

The improvement in the symptoms when patients were given HRT and NON-HRT treatments for 4 weeks. In the women taking treatment, there was significant improvement in symptoms like hot flushes, physical and mental exhaustion and joint and muscular pain.

## Statistical Analysis:

The collected data was summarized by using frequency, percentage, mean & S.D. To compare the qualitative outcome measures Chi-square test or Fisher's exact test was used. To compare the quantitative outcome measures independent t test was used. If data was not following normal distribution, Mann Whitney U test was used. SPSS version 22 software was used to analyse the collected data. p value of

<0.05 was considered to be statistically significant.

## Discussion

Recent cohort studies confirm that only hot flushes, night sweats and vaginal dryness are provenly associated with ovarian failure. Experiments have demonstrated that these symptoms and insomnia associated with nocturnal vasomotor symptoms are more effectively controlled by oestrogen than placebo. Hormonal interventions include a variety of oestrogen or oestrogen/progestogen regimes. Non-hormonal treatments of flushes include exercise, paced respiration and psychotherapy. After the menopause, vaginal atrophy and some urinary symptoms respond to local estrogen therapy and vaginal dryness can also be prevented by use of lubricants. Libido is not increased by oestrogen therapy but may be improved by testosterone. Depression is common in middle-aged women but is not specifically associated with the hormonal changes occurring at the menopause.

Oestrogen therapy may improve and stabilise mood during the peri-menopause but there is no firm evidence that it is effective for depression after the menopause. Arthralgia is not a symptom specific to menopause and experimental evidence concerning the role of oestrogen in the treatment of rheumatoid arthritis is inconclusive. Cognitive function is not related to menopause and measures such as cessation of smoking, exercise and maintaining healthy body weight may be partly effective in preventing menopausal symptoms. [3]

Of the 500 women interviewed in Mumbai by Shah RS et al., 34.4% did not have any menopausal complaints. Among those who had complaints, the most frequently noted were muscle and joint pain (37.4%) and fatigue (35.6%), hot flushes (19.4%), sweating (18.6%), insomnia (20.6%) and headache (13.8%). [4]

Common menopausal complains experienced by women from Jammu, India were fatigue and lack of energy (72.93%), headache (55.9%), hot flushes, cold sweats, cold hands and feet (53.86% each) and weight gain (43.13%). Bellinger interviewed women and found that 93% of women complained of "loss of interest in most things", 83% felt pressure or tightness in the head, 67% complained of weight gain and 54% experienced hot flushes. Vasomotor symptoms were reported by 1211(75.3%) women and psychological symptoms by 999(62.01%), physical ailments by 515(32%) and genitourinary by 250(15.53%). Incidence of various symptoms is found to be different in the rural and urban population. [9, 10]

A comparative study in rural and urban women was done by Sagdeo MM et al on Menopausal symptoms. An observational study by Tandon VR et al was done in which they studied pattern of menopausal symptoms in a tertiary care hospital of North India. Tasnim S et al shared experience of menopause and menopausal transition among middle aged women attending a peri urban hospital. The objective all above studies was to explore frequency of menopause related symptoms among women and their perception about menopause. Information was sought regarding menstrual pattern, self-reported menopausal symptoms and attitude towards menopausal transition. Data analysis was done using SPSS version 16. Common menopausal symptoms were insomnia 51.8%, body ache 44.3% and feeling sad 31.3%. Hot flush and night sweats were reported by 50% and 33% respectively. Half of them regard menopause as normal and health seeking for menopausal problems was 42.5%. [11-13]

Shorey S et al did a meta-synthesis on the experiences and needs of Asian women experiencing menopausal symptoms. Asian women generally had neutral or

positive attitudes toward menopause, but their negative physical, emotional, and psychosocial experiences highlighted their unmet needs and unpreparedness for this phase of life. Diverse self-management strategies were adopted, but there was a high demand for more trustworthy informational resources. Asian women in Western societies were not highly acculturated and retained traditional practices. Although cultural influences serve as a protective factor against menopausal symptoms, the traditional and conservative nature of the Asian society poses as a help-seeking barrier. Therefore, to ensure the healthy well-being of postmenopausal women, the implementation of culturally appropriate mitigation and management strategies is necessary. [13]

The study by Dasgupta D et al sought to examine variations in menopausal characteristics between rural and urban women and the ways in which these characteristics could be predicted from differential sociodemographic variables related to the residential status. Multivariate analyses revealed that rural-urban residential status and duration of breastfeeding of child were significant predictors of age at menopause. Residential and literacy status, duration of breast feeding of child, and husband's awareness about the menopausal status of spouse were significant predictors of some of the menopausal symptoms. [14]

MRS is a well-known and validated instrument for assessing the frequency and intensity of menopausal symptoms. A Cross-Sectional Study by Mahawar P et al on assessment of morbidity pattern and its knowledge assessment of peri-and postmenopausal women using menopause rating scale. Similarly, Kakkar V et al did assessment of the variation in menopausal symptoms with age, education and working/non-working status in north-Indian sub population using menopause rating scale (MRS). The results were

evaluated for psychological (P), somatic (S), and urogenital (U) symptoms. The average age at which menopause set in, in the cohort was found to be  $48.7 \pm 2.3$  years (46.4–51 years). Working women seem to suffer more from psychological symptoms whereas non-working women showed a greater incidence of somatic symptoms. Educated women showed a lower incidence of psychological and somatic symptoms. Present study indicates that age, level of education and working/non-working status (in a group of women with same socio-cultural background) may also contribute to significant variations in menopausal symptoms. [15, 16]

Ovarian function can start to decline a few years before the eventual cessation of the menstrual cycle. Women can experience many symptoms such as vasomotor and vulvovaginal symptoms that impact them physically, psychologically, sexually and thus their overall wellbeing. Women may have medical contraindications to hormonal therapy or may prefer non-hormonal or alternative treatments. Djapardy V et al studied alternative and non-hormonal treatments to symptoms of menopause. This review looks at the evidence, efficacy, and safety of a range of complementary or alternative treatments and non-hormonal pharmacological treatments for the treatment of vasomotor symptoms and vulvovaginal atrophy of menopause. [17]

Increasing numbers of women are requesting non-hormonal treatments for menopausal symptoms. Estrogen-containing HRT is the most effective treatment for menopausal symptoms in healthy women but is contraindicated for some women and avoided by many others. Hickey M et al did similar study like above on non-hormonal treatments for menopausal symptoms. This review will assess the evidence regarding the safety and efficacy of non-hormonal treatments for menopausal symptoms. [18]

Pearlstein T studied the use of psychotropic medications and other non-hormonal treatments for premenstrual disorders. Selective serotonin re-uptake inhibitors have well-established efficacy for severe premenstrual syndrome and premenstrual dysphoric disorder. Efficacy has been reported with both continuous dosing (all cycle) and intermittent or luteal phase dosing (from ovulation to menses). Efficacy may be less with intermittent dosing, particularly for premenstrual physical symptoms. The efficacy of symptom-onset dosing (medication taken only on luteal days when symptoms occur) needs further systematic study. Women going through the menopausal transition may need to adjust their antidepressant dosing regimen due to the change in frequency of menstruation. Anxiolytics, calcium, chasteberry and cognitive-behaviour therapy may also have a role in the treatment of premenstrual symptoms. [19]

The International Menopause Society defines menopause as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. It is recognised to have occurred after 12 consecutive months of amenorrhoea, for which there is no obvious physiological or pathological cause. This article by McBride KL outlines, and evaluates the evidence for, the range of non-hormonal options available for managing the menopause. [20-22]

### Conclusion

A large proportion of postmenopausal women suffered from menopausal symptoms. The most common menopausal complaints reported by the postmenopausal women were sleep disturbances, muscle or joint pain, hot flushes and night sweats. Sexual life was also affected by menopause. Moreover, postmenopausal women suffered from depression and anxiety.

### Declarations:

**Funding:** None

**Availability of data and material:** Department of Obstetrics & Gynecology J.K. Hospital L.N. Medical College Bhopal

**Code availability:** Not applicable

**Consent to participate:** Consent taken

**Ethical Consideration:** There are no ethical conflicts related to this study.

**Consent for publication:** Consent taken

**What This Study Add To Existing Knowledge** A significant proportion of women suffer from vasomotor and psychosomatic symptoms but most of them do not seek treatment. To ensure quality of life health needs of women should be identified and their views towards menopause incorporated in formulating services for them. Education should be given to women at different levels. Seminars and other educational programs are the need for propagating the information regarding the postmenopausal symptoms. Public healthcare systems should organize resources and take measures to improve women's awareness and knowledge about menopause-related changes. A recommendation for physicians and to all the personnel involved in the care of post-menopausal women would be to provide more information about menopausal symptoms and also therapies to alleviate these symptoms.

### Contribution by Different Authors

**First and Corresponding author** Dr. Priyanka Jain Assistant Professor Department of Obstetrics & Gynaecology J.K. Hospital L.N. Medical College Bhopal, Data collection and statistical analysis

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