

# Menopause: but where's the pause?

## Abstract

**Aim:** To study the prevalence of various psychological, somatic and urinary symptoms in menopausal women at a tertiary care centre.

**Introduction:** Menopause is an important phase in a women's life and its association with psychosomatic symptoms is a growing cause of concern. The most commonly assumed biological explanation is oestrogen deficiency. Although hot flushes may be distressing, psychosocial factors, including stressful life events and socioeconomic status, have more impact upon mood than does menopause itself. But often these problems are underreported as most of the women do not come up with their symptoms because of personal and social reasons.

**Material and methods:** This was a cross sectional study conducted in the Department of Obstetrics & Gynaecology at Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi. 100 women who attended the menopause clinic from August 2013 to March 2014 were recruited. These women were divided into two groups i.e. women in early menopause and late menopause. Parameters studied were psychological, somatic and genitourinary complaints. Comparison was done between women having natural vs surgical menopause. These symptoms were elicited on the basis of a health questionnaire and their prevalence was calculated.

**Results and conclusion:** The three most prevalent menopausal symptoms for all women were: joint and muscular discomfort (64%), physical and mental exhaustion (50%) and sleeping problems (30%). This was followed by symptoms of hot flushes and sweating (28%), depressive mood (20%), anxiety and sexual problems (20%). This is the best opportunity for the clinician to interact with women and discuss their problems and prevent major health hazards. This is an opportunity to be seized rather missed.

**Keywords:** menopause, quality of life, vaginal health index

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## Aim

To study the prevalence of various psychological, somatic and urinary symptoms in menopausal women at a tertiary care centre.

## Introduction

Menopause which is defined as complete cessation of menstruation for twelve months or more is a normal physiological change. It is an important phase in a woman's life and its association with psychosomatic symptoms is a growing cause of concern. Vasomotor symptoms, sleep disturbances and depressed mood affect a significant proportion of menopausal women. The most common explanation is oestrogen deficiency. Although hot flushes may be distressing, psychosocial factors, including stressful life events have more impact upon mood than does menopause itself. But often these menopause related problems are underreported as most of the women do not come up with their symptoms because of personal and social reasons. Clinicians who interact with women at the time of menopause have an invaluable opportunity that should be utilized. There is not much literature which is available highlighting this aspect. So, a study was undertaken at our tertiary care centre which is one of the Asia's busiest hospitals to study the prevalence of various psychological, somatic and urinary symptoms in menopausal women.

## Material and methods

This was a prospective study conducted in the Department of Obstetrics & Gynaecology at Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi. 100 women who attended the menopause clinic from August 2013 to March 2014 were recruited in

the study. These women were divided into two groups i.e. women in early menopause (0-5 years) and those in late menopause (6-10 years). Various parameters were studied including psychological, somatic problems viz. vasomotor as hot flushes and night sweats, irritability, depression, insomnia, anxiety, fatigue, sexual behaviour and loss of concentration. The prevalence of urinary symptoms was also studied. Comparison was done between women having attained natural menopause vs surgical menopause. The menopausal symptoms were elicited on the basis of a health questionnaire and their prevalence was calculated. We used Microsoft Excel to interpret the data. Comparison was done using chi square test. Two sided *P*-values are reported. We have considered a *p* value < 0.05 as statistically significant.

## Inclusion criteria

All women who had attained menopause: surgical or natural.

## Exclusion criteria

- Those who were >10 years into menopause.
- Those on any hormonal therapy.
- Pre-existing medical disorders like diabetes, hypertension, cardiac disease, and thyroid disorders.

## Data was analysed under three sections

- Socio-demographic information
- Postmenopausal status
- Experience of symptoms (Menopause Health Questionnaire)

Menopause rating scale is a valuable tool for assessing health related quality of life of women in the menopausal transition and is used worldwide.<sup>1</sup> Menopause health questionnaire was used to assess the frequency and severity of symptoms. The menopause health questionnaire is self-administered and consists of a total of 11 items including vasomotor, psychosocial, physical, sexual, bladder problems. Items pertaining to a specific symptom are rated from a score of 0 (none) to 4 (very severe).<sup>1</sup>

Vaginal health index scoring was done for all the patients. The Vaginal Health Index is a system used to evaluate vaginal elasticity, fluid volume, pH, epithelial integrity, and moisture on a scale of 1 to 5.<sup>2</sup> Comparison was done between women who had attained medical menopause and those having surgical menopause (Table 1).

**Table 1** Vaginal health index score

|                                      | 1                              | 2  | 3  | 4  | 5  |
|--------------------------------------|--------------------------------|--|--|--|--|
| Elasticity                           | None                           | Poor                                     | Fair                                       | Good   | Excellent  |
| Fluid Volume (pooling of secretions) | None                           | Scant Amount, Vault not entirely covered | Superficial amount, Vault entirely covered | Moderate amount of Dryness (small areas of dryness on cotton-tip applicator) | Normal amount (fully saturates on cotton-tip applicator) |
| pH                                   | ≥6.1                           | 5.6–6.0                                  | 5.1–5.5                                    | 4.7–5.0  | <4.6   |
| Epithelial Integrity                 | Petechiae noted before contact | Bleeds with light contact                | Bleeds with Scraping                       | Not Friable, Thin Epithelium   | Normal   |
| Moisture (Coating)                   | None, surface Inflamed         | None, surface not Inflamed               | Minimal                                    | Moderate   | Normal   |

## Observation and results

Following observations were made in the study population of 100 menopausal women. The mean age of women in the present study was 54.57 years (45-64 years). Out of these, 73 % of women had no formal education 17 % went to high school, 5 % each were graduates and post graduates. 78% of the women were unemployed.

### Menopausal status (Table 2)

**Table 2** Menopausal status

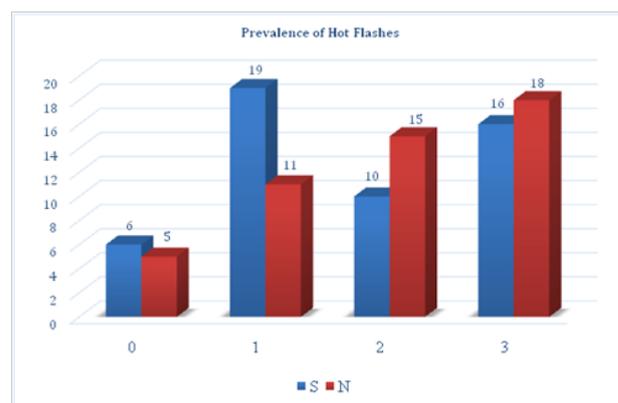
| Duration of Menopause (in years.) | No of Women |
|-----------------------------------|-------------|
| 0-5                               | 72          |
| 10-Jun                            | 28          |

49 % had medical menopause and 51% had surgical menopause. The frequency of menopausal symptoms was assessed by the Menopause Questionnaire. The three most prevalent symptoms for all menopausal women (n=100) were: joint and muscular discomfort (64%), physical and mental exhaustion (50%) and sleep disorders (30%). This was followed by symptoms of hot flushes and sweating (28%), depressive mood (25%), anxiety and sexual problems (20% each) (Table 3).

**Table 3** Frequency of symptoms in the participants according to menopausal status using the menopause questionnaire

| S.No. | Menopausal symptoms            | n  | (0-5 yrs)<br>N (%) | (6-10 yrs)<br>N (%) |
|-------|--------------------------------|----|--------------------|---------------------|
| 1     | Joint and Muscular Discomfort  | 64 | 39 (54.16%)        | 25 (89.28 %)        |
| 2     | Physical and Mental Exhaustion | 50 | 30 (41.66 %)       | 20 (71.42 %)        |
| 3     | Depressed Mood                 | 25 | 22 (30.55 %)       | 3 (10.71%)          |
| 4     | Hot flushes, Sweating          | 28 | 23 (31.94 %)       | 5 (17.85 %)         |
| 5     | Anxiety                        | 20 | 16 (22.22 %)       | 4 (14.28 %)         |
| 6     | Sexual Behaviour               | 20 | 8 (11.11 %)        | 12 (42.85 %)        |
| 7     | Sleep Problems                 | 30 | 26 (36.11 %)       | 4 (14.28 %)         |

It was observed that 34 % of women had 3 hot flushes per day, 25% had 2/day, 30 % had 1 and only 11 % experienced no hotflushes. The relation of number of hot flushes with the type of menopause was also studied and results were as depicted in Figure 1. However it was observed that the relation with type of menopause was not significant (p value: 0.347).



**Figure 1** Prevalence of hot flushes.

(X Axis, no. of hot flushes; Y Axis: no. of patients; S, surgical, N, natural)

Vaginal health index scoring was done for all the patients and results were analysed comparing natural vs surgical menopause. The results were comparable in the two groups. Figure 2 shows comparison of vaginal health index score in women who had attained surgical or natural menopause within past 5 years. The results were almost same in two groups. It was observed that the relation with type of menopause is not significant (p value: 0.91). Figure 3 shows vaginal health index scoring in women who had attained menopause 6-10 years back. Statistical analysis depicted no relation with type of menopause. (P value:0.60) (Df-2).

55% of women experienced urinary symptoms in form of urinary incontinence which included stress, urge, mixed incontinence and frequent urination. 40 % had these symptoms after natural menopause and 15% belonged to surgical menopause group. There was a significant association between urinary symptoms experienced by women having attained natural menopause unlike those having attained surgical menopause. So, association of urinary symptoms with natural menopause is statistically more significant (p value 0.00000015).

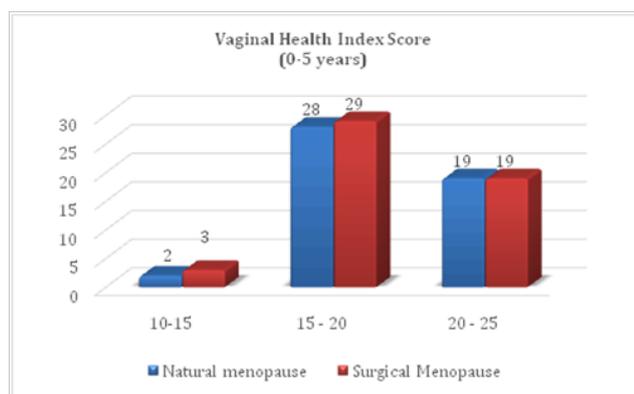


Figure 2 Vaginal health index scoring. (x axis, score; y axis, no. of patients)

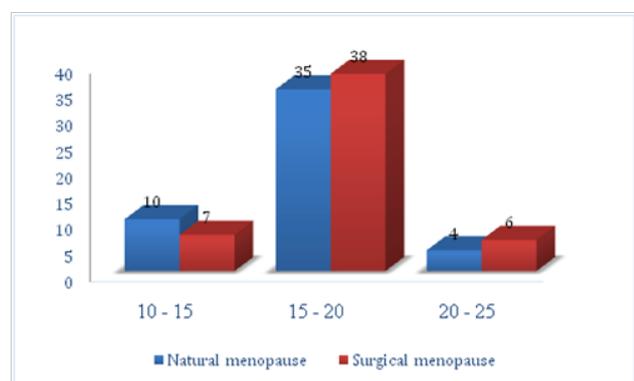


Figure 3 Vaginal health index scoring. (X Axis, score; Y axis, no. of patients)

## Discussion

Leon Speroff has rightly said “The ovaries after long years of service, have not the ability to retire in graceful old age, but become irritated, transmit their irritation to the abdominal ganglia, which in turn transmit the irritation to the brain, producing disturbances in the cerebral tissue exhibiting themselves in an outburst of actual insanity”.<sup>3</sup>

With the general increase in life expectancy, women are likely to live >20 years after menopause, spending about 1/4th of their life in a state of oestrogen deficiency. We are on the verge of becoming a rectangular society- a society where nearly all individuals survive to advanced age and then succumb rather abruptly over a narrow age range centering around the age of 85.<sup>3</sup>

In our study, our basic aim was to study the prevalence of various symptoms in menopausal women. We evaluated the quality of life of menopausal woman according to the menopause questionnaire. Most common symptoms observed were joint & muscular discomfort, physical & mental exhaustion and sleeping problems. The results were comparable to other studies.<sup>4-6</sup>

These were found to be more prevalent in women presenting within 6-10 years of menopause as compared to women in 0-5 years of menopause. In Uro-genital subscale, frequency of symptoms (as sexual problem, bladder problem & vaginal dryness) was experienced mainly by women in 6-10 years of menopause. This can be attributed to loss of elasticity of the vulva and senile vaginitis because of falling oestrogen levels which causes changes in the lower urinary tract for

example the urinary bladder and urethra may display symptoms of stress incontinence, urgency, and frequency.

Vasomotor symptoms are definitely a cause for concern. Women in early menopause (0-5 years) experience more vasomotor symptoms as compared to women within 6-10 years of menopause. In United States, African-American women reported hot flushes most frequently (45.6%) followed by Hispanic (35.4%), Caucasians (31.2%), Chinese (20.5%) and Japanese (17.6%).<sup>7</sup> In our study vasomotor symptoms were experienced by 28 %. The prevalence of hot flushes can be explained by the fact that in these group of women estrogen fluctuation occurs the most & hence they will experience more vasomotor symptoms. Our results were comparable to other studies.<sup>8</sup>

Vaginal health index scoring was done. It was observed that the scores were almost comparable in both the groups; i.e, women having attained natural and surgical menopause. Menopause is an estrogen deficient state. This index reflects the effects of estrogen on the various vaginal parameters with a low score signifying decreased levels of estrogen and basically aids in further management of patients. It has been suggested that about 50% of otherwise healthy women over 60 years of age have symptoms related to vaginal atrophy.<sup>9</sup> In about 45% of menopausal women vaginal atrophy can be clinically manifest as a syndrome of vaginal dryness, itching, irritation and dyspareunia.<sup>10</sup> Vaginal pH is a very useful instrument for the assessment of the vaginal epithelium and monitoring the effects of oestrogen treatment in vaginal atrophy.<sup>9</sup> The progressive lowering of the vaginal pH serves as a simple and cost effective means of ensuring efficacy of treatment.<sup>11</sup>

There are certain limitations of this study. As this was a cross sectional study, it does not exclude other confounding effects of the natural aging process that may influence experience of symptoms. In collecting data, women were asked to provide some retrospective information, such as menopausal symptoms experienced in the preceding one month, last menstruation etc. Hence recall bias is unavoidable, especially for some elderly women.

## Conclusion

Menopause is a transition and not a disease, but it can have a big impact on a woman's well-being. The phase of menopause begins a new chapter in a woman's life. A women entering this phase may be completely asymptomatic or may present with varied symptoms may be psychological, somatic and urinary symptoms affecting her quality of life. Often observed, women do not come up with their problems because of personal and social concerns but if screened methodically various problems may surface. This is the best opportunity for the clinician to interact with women and discuss their problems and put a pause to and thereby prevent major health hazards. This is an opportunity to be seized rather missed.

## Acknowledgments

None.

## Conflicts of interest

The authors declare there is no conflict of interests.

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