



AN AUDIT OF MENOPAUSAL SYMPTOMS AND ITS MANAGEMENT IN A TERTIARY CARE CENTRE OF CENTRAL INDIA – A PROSPECTIVE STUDY

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ABSTRACT

Background : Menopause marks a major physical and psychological change in every woman's life with a spectrum of symptoms that affect her daily routine. However, these menopausal symptoms present as an iceberg phenomena in the clinical setting. In order to overcome this, the MENQOL questionnaire has been developed as a validated research tool to measure the various symptoms of menopause and to assess post treatment improvement felt by patient .[1]

Objectives:

- To observe the distribution of menopausal symptoms with the help of a validated questionnaire
- Assessment of improvement in symptoms after 4 weeks of management.

Methodology: A Prospective observational study was conducted in a tertiary care centre of central India, over a period of 6 months from January 2019 to June 2019. All menopausal women who presented to the gynaecological OPD were subjected to Standard and validated MENQOL questionnaire and were asked for rating of menopausal symptoms and assessment in improvement of symptoms done with the same questionnaire after 4 weeks therapy.

Women with severe osteoporosis, severe mood disorders or depression and MENQOL Rating score <3 were excluded from the study.

Results: Total 256 menopausal women presented to the outpatient department over the periods of 6 months, Among them 238 women were included in the study who were fulfilling the inclusion criteria .The results concluded that the mean age of our study population was 47 ± 3 years ,with maximum women falling in the category of 44 -52years. Majority of women (72%) experienced vasomotor symptoms followed by sleep disturbances (55%) ,genitourinary symptoms (44%),low energy (32%), sexual dysfunction (26%), mood disorders (21%), and body image changes (18%). Most of the women had an overlapping of these symptoms. Treatment was mainly symptom oriented & significant improvement was seen in vasomotor symptoms ($P=0.00059$) ,sexual dysfunctions ($P = 0.0077$), low energy ($P=0.0042$), genitourinary symptoms ($P=0.003234$), and in sleep disturbances ($P=0.049$).

Conclusion: MENQOL can be used as a simple diagnostic tool in clinical journey of menopause for detection of symptoms and evaluation of treatment success , but further research is needed before recommending the routine use of MENQOL in clinical settings.

KEYWORDS : MENOPAUSE, MENQOL

INTRODUCTION:

Menopause is known as a transition phase for the woman, in which she goes from the reproductive to the non reproductive phase of life. [3]The point in time that follows one year after the complete cessation of menstruation is known as menopause, whereas all the years that follows this point is referred to as post menopause. [4]In fact, menopause denotes the permanent cessation of ovarian function, and therefore signifies that a woman's reproductive potential has ended. [5]

WHO defines health related quality of life as "an individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns", taking into account a woman's symptoms. [3]The age at menopause in both developing and developed countries ranges between 45 to 53 years. [6]The mean age of attaining menopause in India is 46 years, which is earlier than the average Caucasian woman. This signifies that the average Indian woman is predisposed earlier to chronic health and aging disorders. [3,5] Genetic and other modifiable factors influence the age at menopause and decrease in ovarian reserve. [6]When this occurs, women report a range of symptoms from minimal to debilitating disturbances in their daily activities with reduction of their quality of life. Previous studies have been conducted that show four core menopausal symptoms, namely vasomotor symptoms (VSM), genitourinary syndrome of menopause

(GSM), somatic symptoms, and neuropsychiatric symptoms. [3]

[7,8]Rarely menopausal women will share the real problems that they are facing. It is also noted that symptoms are more prevalent amongst those women having surgical or induced menopause. [9] In order to overcome this discrepancy, MENQOL, the Menopause-Specific Quality of Life questionnaire has been developed as a validated research tool, in order to give a comprehensive assessment of how the symptoms affect their quality of life. [1] It was first introduced in 1996 as a patient-reported outcome (PRO) tool for measuring condition-specific QOL in early menopause.

It consists of a 29-item questionnaire with four domains: vasomotor, physical, psychosocial, and sexual symptoms. [10] Therefore, this study aimed to bring these symptoms into light, and improve the quality of life of these women by giving them appropriate management for the same.

MATERIAL AND METHODS:

This was a Prospective observational study conducted at tertiary care centre over a period of 6 months from January 2019 to June 2019.

All menopausal women who presented to the gynaecological outpatient department during the duration of the study were administered the MENQOL questionnaire and asked to rate

these symptoms between 0 to 6 according to how much bothered by the problem, with 0 being not at all bothered and 6 being extremely bothered. Women with menopausal symptoms rating score ≥ 3 were included in the study. Women having score less than 3, i.e. those not bothered by the symptoms and cases of severe osteoporosis, severe mood disorders or depression were also excluded from the study and referred to respective department for further management.

According to the complaints and symptomology, women in the study group were offered various management options like hormonal replacement therapy (HRT) and non hormonal therapy which included counselling, lifestyle modifications, calcium, antioxidants, vitamin D, and vitamin E supplements. After a period of 4 weeks, they were administered the second part of the MENQOL questionnaire in which they were questioned on how satisfying the treatment and overall relief of symptoms. All those reporting that they were satisfied or extremely satisfied by their treatment as per MENQOL questionnaire were considered as improvement of symptoms. 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.

RESULTS:

A total of 256 menopausal women presented to the outpatient department over the periods of 6 months, Among them 238 women were included in the study who were fulfilling the inclusion criteria. It was observed that the majority of women (72%) experienced vasomotor symptoms which included experiencing hot flashes, excessive sweating or night sweats followed by sleep disturbances (55%) and genitourinary symptoms (44%) which included frequent urination and involuntary urination while laughing or coughing. Many women also complained of low energy (32%), followed by complaints of sexual dysfunctions (26%) which included vaginal dryness and pain during intercourse, change in sexual desire and avoiding intimacy. Mood disorders were seen in 21% cases in the form of dissatisfaction with life, anxiety, and depression. The least common symptom was body image changes (18%) such as weight gain, drying skin, increased facial hair, change in appearance, tone of skin, aches in muscle and joints. Also Majority of women had an overlapping of these symptoms, experiencing multiple of them at the same time.

Table 1 Distribution Of Menopausal Symptoms Assessed By MENQOL

| S.No | Symptoms | Distribution n (%) |
|------|------------------------|--------------------|
| 1. | Vasomotor symptoms | 171 (72) |
| 2. | Sleep disturbances | 130 (55) |
| 3. | Genitourinary symptoms | 104 (44) |
| 4. | Low energy | 76 (32) |
| 5. | Sexual dysfunctions | 62 (26) |
| 6. | Mood disorders | 50 (21) |
| 7. | Body image changes | 43 (18) |

Symptom oriented management was provided to each patient, either hormonal replacement therapy as per the protocol with proper monitoring or non-hormonal therapy in the form of counselling, lifestyle modification, calcium, antioxidants, vitamin D and vitamin E supplementation. After a period of 4 weeks, the second part of MENQOL was administered and those reporting that they were satisfied or extremely satisfied by the treatment were considered as having improvement of symptoms. Those having vasomotor symptoms were provided with HRT in 76% of cases which showed an improvement of 60%, whereas those with non hormonal therapies given in 24% of cases showed an improvement of 30%. Overall improvement was seen in 53 % women (P=0.00059). Among the women having complaint of

sleep disturbances, 83% took HRT with an improvement of 45%, whereas those 17% who took non-hormonal therapies showed an improvement of only 23%. Total 42 %women relieved from sleep problems (P value =0.049). Then, the women with genitourinary symptoms were provided with HRT in 73% of cases with an improvement of 65%, while those provided with non-hormonal therapies in 27% of cases showed an improvement of 32%. overall improvement was significant (P value =0.00323). Women with sexual dysfunctions also benefited from HRT with an improvement of 73% in symptoms, whereas 39% improvement was seen with non-hormonal therapies. Total 53% cases relieved (P value =0.0077). Women with low energy also showed significant improvement with the therapy (P=0.0042). Moreover cases of Mood disorders and body image changes on HRT shows an improvement of 30%, and 31% respectively whereas non hormonal therapies were better for these particular symptoms with an improvement of 40% and 52% respectively but statistically no significant result was seen in these symptoms (P value >0.05).

Table 2. Improvement Of Menopausal Symptoms After Management For 4 Weeks According To Therapy Given .

| Symptoms | Distribution n (%) | HRT n (%) | Improvement n (%) | Non HRT n (%) | Improvement n (%) |
|------------------------|--------------------|-----------|-------------------|---------------|-------------------|
| Vasomotor symptoms | 171 (72) | 130 (76) | 78 (60) | 41 (24) | 12 (30) |
| Sleep disturbances | 130 (55) | 108 (83) | 49 (45) | 22 (17) | 5 (23) |
| Genitourinary symptoms | 104 (44) | 76 (73) | 49 (65) | 28 (27) | 9 (32) |
| Low energy | 76(32) | 15 (20) | 4 (27) | 61 (80) | 41(68) |
| Sexual dysfunctions | 62 (26) | 26 (42) | 19 (73) | 36 (58) | 14 (39) |
| Mood disorders | 50 (21) | 20 (40) | 6 (30) | 30 (60) | 12 (40) |
| Body image changes | 43 (18) | 16 (37) | 5 (31) | 27 (63) | 14 (52) |

Table 3. Overall Improvement Of Menopausal Symptoms After 4 Weeks Of Management

| Symptoms | Pre treatment distribution n (%) | Post treatment improvement n (%) | P value |
|--------------------------|----------------------------------|----------------------------------|---------|
| 1.Vasomotor symptoms | 171 (72) | 90 (53) | 0.00059 |
| 2.Sleep disturbances | 130 (55) | 54 (42) | 0.049 |
| 3.Genitourinary symptoms | 104 (44) | 58 (56) | 0.00323 |
| 4.Low energy | 77 (32) | 45 (60) | 0.0042 |
| 5.Sexual dysfunctions | 62 (26) | 33 (53) | 0.0077 |
| 6.Mood disorders | 50 (21) | 18 (36) | 0.470 |
| 7.Body image changes | 43 (18) | 19 (44) | 0.188 |

DISCUSSION:

The results obtained in this study permitted us to assess the various symptoms associated with menopause. Usually , women are not forthcoming about these symptoms partly due to the social stigma, lack of self awareness and negligent attitude of family members.

MENQOL scale is a very effective tool to assess the symptoms which can direct the management plan accordingly to improve their quality of life. Moreover, there are many barriers towards menopausal treatment, especially HRT, at all levels starting from patient to physician to public suboptimal awareness regarding the same.^[1,11]

Study by Santoro N et al. has stated that menopause is associated with four core symptoms, namely vasomotor symptoms, vaginal dryness/dyspareunia, insomnia and adverse mood/depression. Besides these, patients also experience urinary incontinence, sexual dysfunction, muscle and joint aches, body image changes, etc.^[10] As the results in this study also depict, the most common reason to seek medical attention are the vasomotor symptoms mainly hot flushes, often increased during night, which are described as sudden sensation of heat in the face, neck and chest persisting for several minutes or less. Other vasomotor symptoms include palpitation, anxiety, chills, and sleep disturbance.^[9] Many studies have shown that the postmenopausal hormonal therapy, especially oestrogen helped in reducing these symptoms.^[12] Various treatment modalities exist for the management of menopausal symptoms.^[7,8] It ranges from counselling and lifestyle changes to medical management.

The incidence of vasomotor symptoms in our study was 72%, which is quite similar to a multicenter hospital-based study that concluded that the incidence of vasomotor symptoms was found to be 75% among menopausal women.^[3]

Menopausal women tend to have impaired balance due to aging and a central effect of oestrogen deficiency. This impaired balance may lead to an increased incidence of fractures among these women. Lastly, oestrogen deficiency can also lead to a reduction in the collagen content of skin and bone which may lead to wrinkling of skin, balding etc. This study showed 44% of women had complaints of genitourinary symptoms. Similarly, a study published by IMS, showed that the overall prevalence of urogenital symptoms was approximately 15%. Among them the majority reported as vaginal dryness, followed by pruritus vulvae, dyspareunia, urinary urgency and recurrent urinary tract infections.^[3] The occurrence of these symptoms can once again be linked to declining levels of estrogen hormone which lead to urogenital atrophy. The most effective medical management for these symptoms is hormonal therapy, supported by life style modifications, awareness and counselling. If contraindicated, then non hormonal agents can be used for the relief of symptoms. Treatment of symptoms of vaginal dryness and dyspareunia can be with local estrogen therapy and by utilizing vaginal moisturizers and lubricants. In cases of urinary incontinence, lifestyle modifications and pelvic floor exercises can greatly help in management.^[3]

Various studies have demonstrated that estrogen treatment acts on increasing the collagen content of the skin whose decline is responsible for the atrophy seen during menopause. Depending on its dose, route and duration of use, the use of estrogen hormonal treatment can significantly increase the collagen levels.^[12]

But, in this study changes in body images did not show significant improvement, that may be because of subjective variations.

Mood disorders were observed in 21% of the women included in our study, out of which those receiving HRT showed a 30% improvement in symptoms as compared to a 40% improvement seen among those receiving other forms of therapy. The difference in improvement in mood symptoms in this study may be either due to noncompliance to treatment or

not given proper feedback after 4 weeks. One study conducted showed a full or therapeutic response in 80% of patients receiving estradiol as compared to 20% among those receiving the placebo. Their data showed the beneficial effects of estradiol therapy on the women reporting depressive symptoms.^[13]

Recently, complementary and alternative medicine (CAM) for [6] symptom management has been included as well as shown in a study conducted by Johnson A et al. CAM includes natural products, such as herbs, vitamins, minerals and dietary supplementation, as well as mind body practices which consists of cognitive behavioural therapy, meditation and relaxation, and aromatherapy. Alternative medicine is a spectrum of modalities aimed to heal the body with natural methods such as traditional Chinese medicine, reflexology, acupuncture and homeopathy.^[2]

CONCLUSION –

The MENQOL questionnaire is a self-administered instrument which is based on women's own qualitative and quantitative experience, not simply on the basis of clinical or expert judgment. It also permits the patient to disclose the problems they face on a day to day basis and measures the changes in their quality of life over time. But, more studies are required for its routine use in clinical practice.

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