MAK HILL Publications Research Journal of Medical Sciences

Research Article
doi: 10.59218/makrjms.2024.3.371.375

A Prospective Study - Menopausal Symptoms and Their Management in a Tertiary Care Center in Central India

[1]Siftie Banga, [2]Rani Momaya, [3]Priyanka Patel and [4]Tanya Mahindra

[1]Department of Obstetrics and Gynaecology, Bundelkhand Medical College, Sagar, Madhya Pradesh, India
[2]Department of Obstetrics And Gynaecology , Nandkumar Singh Chouhan Government Medical College, Khandwa, Madhya Pradesh, India
[3]Department of Obstetrics And Gynaecology, Bundelkhand Medical College Sagar, Madhya Pradesh, India
[4]Department of Obstetrics and Gynaecology, Civil Hospital, Sirmour, Rewa, Madhya Pradesh, India

ABSTRACT

Menopause marks a significant physiological transition in a woman's life, often accompanied by various symptoms that can significantly impact quality of life. Hormone replacement therapy (HRT) and non-hormonal interventions are commonly utilized to alleviate these symptoms, but their comparative effectiveness remains an area of interest. This prospective comparative study aimed to evaluate the efficacy of HRT versus non-hormonal therapy in managing menopausal symptoms among rural women aged 40-60 years. Participants were allocated to either the HRT or non-hormonal therapy group based on preference and medical suitability. Baseline assessments were conducted using the Menopause-Specific Quality of Life (MENQOL) questionnaire, with follow-up assessments after 4 weeks of treatment. Symptom improvement was assessed using a rating scale, and statistical analyses were performed to compare outcomes between groups. A total of 200 women were included in the study, with varying degrees of menopausal symptoms reported at baseline. Significant improvements were observed in both groups following 4 weeks of treatment. HRT showed effectiveness in alleviating vasomotor symptoms (76%), sleep disturbances (83%), and genitourinary symptoms (73%). Non-hormonal therapy demonstrated efficacy in addressing low energy (68%) and sexual dysfunctions (58%). Overall, both treatment modalities led to substantial improvements in menopausal symptoms, with statistical significance observed across various domains. The findings suggest that both HRT and non-hormonal therapy are effective in managing menopausal symptoms among rural women. Individualized treatment approaches tailored to women's preferences and medical suitability are crucial in optimizing symptom relief and enhancing quality of life during the menopausal transition. Further research is warranted to explore long-term outcomes and the sustainability of symptom management strategies in diverse populations.

OPEN ACCESS

Key Words
Menopausal symptoms, MENQOL, middle aged women, prevalence, quality of life

Corresponding Author
Tanya Mahindra,
Department of Obstetrics and Gynaecology, Civil Hospital, Sirmour, Rewa, Madhya Pradesh, India
trajpal5@gmail.com

Author Designation
[1]Senior Resident
[2]Ex-Senior Resident
[3]Assistant Professor
[4]PGMO

Received: 24 December 2023
Accepted: 18 January 2024
Published: 23 January 2024

Citation: Siftie Banga, Rani Momaya, Priyanka Patel and Tanya Mahindra, 2024. A Prospective Study - Menopausal Symptoms and Their Management in a Tertiary Care Center in Central India. Res. J. Med. Sci., 18: 371-375, doi: 10.59218/makrjms.2024.3.371.375

INTRODUCTION

Menopause is the natural process in a woman's life when she transitions from the reproductive phase to the non-reproductive phase. Menopause is characterized by the occurrence of the final menstrual cycle, which happens after 12 consecutive months of not having a period and is not caused by any apparent medical or physiological factors[1,2]. It establishes the conditions for the progression of aging and expedites the development of noncommunicable diseases. The global average age range for menopause is typically between 45 and 55 years[2].

Menopausal symptoms manifest not just in the female reproductive system but also in the skeletal, cardiovascular, and psychological systems. Due to the rising life expectancy, women are expected to experience extended periods of menopause, which can account for nearly one-third of their lifespan[3]. This has led to an increased prevalence of diseases and health conditions.The peri-menopause/menopause transition refers to the time period that occurs right before menopause and continues for up to one year after the final menstrual period. The duration of its existence is typically between 3 and 5 years[1,2]. The menopausal transition is marked by variations in the menstrual cycle and changes in levels of reproductive hormones[4]. The reaction to menopause might vary significantly among individuals, influenced by genetic, cultural, lifestyle, socioeconomic, education, behavioral, and dietary factors. Postmenopausal symptoms lead to social repercussions that ultimately impact their quality of life (QOL). The low quality of life among a large proportion of women in the menopausal phase will impose a substantial strain on public healthcare systems in developing nations such as India. The purpose and goals of our study are to examine the frequency of menopausal symptoms and their impact on the quality of life among women in the middle age range (40-60 years).

MATERIAL AND METHODS

This prospective comparative study aimed to assess the effectiveness of hormone replacement therapy (HRT) versus non-hormonal therapy in alleviating menopausal symptoms. Participants were assigned to one of two groups based on their preference and medical suitability: the HRT group or the non-hormonal therapy group. The allocation was determined by consulting physicians according to established protocols. Baseline assessments were conducted to record demographic data and menopausal symptoms using validated instruments such as the Menopause-Specific Quality of Life (MENQOL) questionnaire. Participants were followed up after 4 weeks of treatment. The primary outcome measure was the change in the severity of menopausal symptoms from baseline to post-treatment. They were asked to rate their symptoms on a scale of 0 to 6, indicating the level of bother caused by each symptom. A rating of 0 meant no bother at all, while a rating of 6 indicated extreme bother. The study comprised women who had a menopausal symptoms rating score of 3 or above. Women with a score below 3, indicating a lack of concern for symptoms and severe cases of osteoporosis, mood disorders, or depression, were also excluded from the study and referred to the appropriate department for further treatment. Based on the complaints and symptoms, the women in the study group were gone for different treatment options, such as hormonal replacement therapy (HRT) and non-hormonal therapy. The non-hormonal therapy includes counseling, making changes to their lifestyle, taking calcium, antioxidants, vitamin D, and vitamin E supplements as per the protocol. After duration of 4 weeks treatment given by consultant, the participants were given the second portion of the MENQOL questionnaire. During this phase, they were asked about their level of satisfaction with the treatment and the overall reduction of symptoms. Participants who indicated that they were satisfied or highly satisfied with their treatment, as shown by the MENQOL questionnaire, were classified as having had symptom improvement. The data was summarized using Microsoft Excel latest version and free online available Statistical calculator. Statistical calculations were then performed by conducting a Chi square test. A probability value (p value) below 0.05 was deemed statistically significant.

RESULTS

During the period of study , a total of 218 women experiencing menopause visited the outpatient department. Out of these, 200 women who met the inclusion criteria were included in the study. A study utilizing the Menopause-Specific Quality of Life (MENQOL) questionnaire revealed varying degrees of menopausal symptoms among participants. Vasomotor symptoms were the most prevalent, affecting 72% of women surveyed, followed by sleep disturbances at 55%. Genitourinary symptoms were reported by 44% of participants, while 32% experienced low energy levels. Sexual dysfunctions and mood disorders affected 26 and 21% of women, respectively, while body image changes were reported by 18%. This distribution highlights the multifaceted nature of menopausal experiences, with vasomotor symptoms and sleep disturbances being particularly prevalent, warranting attention and potential intervention to enhance women's quality of life during this transitional phase (Table 1).

Table 1: Distribution Of Menopausal Symptoms Assessed By MENQOL

	Distribution	
Symptoms	n	Percentage
Vasomotor symptoms	144	72
Sleep disturbances	110	55
Genitourinary symptoms	88	44
Low energy	64	32
Sexual dysfunctions	52	26
Mood disorders	42	21
Body image changes	36	18

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	144 (72)	109 (76)	65 (60)	35 (24)	11 (30)
Sleep disturbanc es	110 (55)	91 (83)	41 (45)	19 (17)	4 (23)
Genitourin ary symptoms	88 (44)	64 (73)	42 (65)	24 (27)	8 (32)
Low energy	64 (32)	13 (20)	4 (27)	51 (80)	35(68)
Sexual dysfunction s	52 (26)	22 (42)	16 (73)	30 (58)	12 (39)
Mood disorders	42 (21)	17 (40)	12 (30)	25 (60)	10 (40)
Body image changes	36 (18)	13 (37)	11 (31)	23 (63)	12 (52)

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

Symptoms	Pre treatment distribution n (%)	Post treatment improvement n (%)	p-value
Vasomotor symptoms	144 (72)	76 (53)	0.00059
Sleep disturbances	110 (55)	46 (42)	0.049
Genitourinary symptoms	88 (44)	49 (56)	0.00323
Low energy	64 (32)	38 (60)	0.0042
Sexual dysfunctions	52 (26)	28 (53)	0.0077
Mood disorders	42 (21)	15 (36)	0.470
Body image changes	36 (18)	16 (44)	0.188

The data from Table 2 illustrates the effectiveness of hormone replacement therapy (HRT) versus non-HRT interventions in alleviating menopausal symptoms over a 4-week management period. Among women receiving HRT, significant improvements were observed across various symptoms, particularly vasomotor symptoms (76%), sleep disturbances (83%), and genitourinary symptoms (73%). However, non-HRT interventions also demonstrated notable efficacy, especially in addressing low energy (68%) and sexual dysfunctions (58%). While HRT appeared to have a higher improvement rate for certain symptoms, both HRT and non-HRT approaches showed substantial benefits in managing menopausal symptoms, indicating the importance of individualized treatment strategies tailored to women's specific needs and preferences.

The data in Table 3 show cases the overall improvement of menopausal symptoms following a 4-week management period. Significant reductions in symptom prevalence were observed across various categories, with notable decreases in vasomotor symptoms (from 72-53%), sleep disturbances (from 55-42%), and genitourinary symptoms (from 44-56%). Additionally, substantial improvements were noted in addressing low energy (from 32-60%) and sexual dysfunctions (from 26-53%). While mood disorders and body image changes showed less significant improvements, the overall trend indicates a positive response to the management strategies employed. The reported p-values highlight the statistical significance of these improvements, underscoring the effectiveness of the intervention in mitigating menopausal symptoms and enhancing the well-being of affected individuals.

DISCUSSION

The findings from this study allowed us to evaluate the different symptoms linked to menopause. Typically, women tend to be hesitant in discussing these symptoms, primarily because of the negative societal perception, limited understanding of their own health, and the indifferent behavior of their family members.

The MENQOL scale is a very efficient tool for evaluating symptoms, which can then guide the care plan to enhance the individual's quality of life. Furthermore, there are numerous obstacles to menopause treatment, particularly Hormone Replacement Therapy (HRT), which exist at various levels including patients, physicians, and the general public due to inadequate information[5,6].

The study conducted by Santoro N et al. has indicated that menopause is linked to four primary symptoms: vasomotor symptoms, vaginal dryness/dyspareunia, sleeplessness, and poor mood/depression. In addition to these symptoms, individuals also suffer from urine incontinence, sexual dysfunction, muscle and joint pain, and changes in body image[7]. As indicated by the findings in this study, the primary motivation for seeking medical assistance is the occurrence of vasomotor symptoms, particularly hot flushes. These symptoms are frequently intensified at night and are characterized by a sudden feeling of

heat in the face, neck, and chest that lasts for few minutes or less. Additional vasomotor symptoms encompass palpitation, anxiety, cold, and sleep disturbance[8]. Multiple studies have demonstrated that postmenopausal hormone therapy, particularly estrogen, has been effective in lowering these symptoms[9]. There are multiple therapeutic options available for managing symptoms related to menopause[10,11]. The options for treatment vary from counseling and making adjustments to one's lifestyle to implementing medicinal interventions.

In our study, the occurrence of vasomotor symptoms was 72%, which closely aligns with the findings of a multicenter hospital-based study that reported a 75% incidence of vasomotor symptoms among menopausal women[12].

Menopausal women often have reduced balance as a result of the natural aging process and the decrease in estrogen levels. The compromised equilibrium may result in a higher prevalence of fractures among these women. Finally, a lack of oestrogen can also cause a decrease in the collagen levels in the skin and bones, resulting in skin wrinkling, hair loss, and other related effects. The findings of this study revealed that 44% of women reported experiencing genitourinary problems. Similarly, a study conducted by IMS revealed that the overall occurrence rate of urogenital symptoms was roughly 15%. The majority of individuals reported experiencing vaginal dryness, followed by pruritus vulvae, dyspareunia, urine urgency, and recurrent urinary tract infections[12]. The presence of these symptoms can once again be attributed to the decrease in levels of estrogen hormone, resulting in urogenital atrophy. Hormonal therapy, along with lifestyle modifications, awareness, and counseling, is the most successful medical approach to managing these symptoms. If a treatment is not recommended, non-hormonal medicines might be employed to alleviate symptoms. The symptoms of vaginal dryness and dyspareunia can be treated via local estrogen therapy, as well as by using vaginal moisturizers and lubricants. Lifestyle modifications and pelvic floor exercises are quite effective in managing urine incontinence[12].

Multiple studies have shown that estrogen treatment effectively increases the collagen composition of the skin, which is responsible for the shrinkage observed following menopause. The use of estrogen hormone therapy can substantially elevate collagen levels, depending on the dosage, method of administration, and duration of usage[9]. However, this study did not observe any significant improvement in body image modifications, maybe due to subjective variances.

Among the women in our study, 21% were found to have mood disorders. Of these, those who received hormone replacement treatment (HRT) experienced a 30% reduction in symptoms, while those who received other forms of therapy saw a 40% reduction. The disparity in the enhancement of mood symptoms observed in this investigation could be attributed to either nonadherence to the treatment regimen or the absence of appropriate feedback provided after a duration of 4 weeks. A study demonstrated that 80% of patients who received estradiol experienced a complete or therapeutic response, but just 20% of those who received the placebo had the same reaction. Their research demonstrated the advantageous effects of estradiol therapy on women who reported experiencing depressed symptoms[13]. A recent study conducted by Johnson *et al*.[14]. has included complementary and alternative medicine (CAM) for symptom treatment. Complementary and alternative medicine (CAM) encompasses various natural items, including herbs, vitamins, minerals, and nutritional supplements. It also includes mind-body therapies, such as cognitive behavioral therapy, meditation, relaxation techniques, and aromatherapy. Alternative medicine encompasses a range of therapeutic approaches that seek to promote healing in the body using natural methods, including traditional Chinese medicine, reflexology, acupuncture, and homeopathy[14].

CONCLUSION

The MENQOL questionnaire is a self-administered tool that relies on women's personal experiences, both qualitative and quantitative, rather than solely on professional or expert opinions. Additionally, it allows the patient to divulge the challenges they encounter on a daily basis and assesses the fluctuations in their quality of life over a period of time. However, further research is necessary to establish its regular application in clinical practice.

REFERENCES

1. Meeta, L. Digumarti, N. Agarwal, N. Vaze, R. Shah and S. Malik, 2013. Clinical practice guidelines on menopause: An executive summary and recommendations. J. Mid-life Health, 4: 77-106.
2. W.H.O., 1996. Research on the menopause in the 1990s. World Health Organ Tech Rep Ser 866: 1 7.
3. Vaze, N. and S. Joshi, 2010. Yoga and menopausal transition. J. Midlife Health, 1: 56 58.
4. Harlow, S.D., M. Gass, J.E. Hall, R. Lobo and P. Maki *et al*., 2012. Executive summary of the Stages of Reproductive Aging Workshop + 10: addressing the unfinished agenda of staging reproductive aging. Menopause, 19: 387-395.

5. Sydora, B.C., H. Fast, S. Campbell, N. Yuksel, J.E. Lewis and S. Ross, 2016. Use of the menopause-specific quality of life (MENQOL) questionnaire in research and clinical practice: A comprehensive scoping review. Menopause, 23: 1038-1051.
6. Kalra, B., T. Lathia, S. Kalra and N. Malhotra, 2020. Barriers and bridges in menopause hormonal therapy. J. Pak. Med. Assoc., 70: 937-938.
7. Hilditch, J.R., J. Lewis, A. Peter, B.V. Maris and A. Ross *et al*., 1996. A menopause-specific quality of life questionnaire: Development and psychometric properties. Maturitas, 24: 161-175.
8. Kaunitz, A.M. and J.E. Manson, 2015. Management of menopausal symptoms. Obstet. Gynecol., 126: 859-876.
9. Brincat, M., Y.M. Baron and R. Galea, 2005. Estrogens and the skin. Climacteric, 8: 110-123.
10. Santoro, N., C.N. Epperson and S.B. Mathews, 2015. Menopausal symptoms and their management. Endocrinol. Metab. Clin. North Am., 44: 497-515.
11. Dalal, P. and M. Agarwal, 2015. Postmenopausal syndrome. Indian J. Psychiatry, 57: 222-232.
12. Meeta, M., L. Digumarti, N. Agarwal, N. Vaze, R. Shah and S. Malik, 2020. Clinical practice guidelines on menopause: An executive summary and recommendations: Indian menopause society 2019-2020. J. Mid-life Health, 11: 55-95.
13. Schmidt, P.J., 2005. Mood, depression, and reproductive hormones in the menopausal transition. Am. J. Med., 118: 54-58.
14. Johnson, A., L. Roberts and G. Elkins, 2019. Complementary and alternative medicine for menopause. J. Evidence-Based Integr. Med., Vol. 24. 10.1177/2515690x19829380.