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## Exploring the efficacy of complementary interventions in managing menopausal symptoms: A comprehensive review

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### Abstract

**Background:** With increasing life expectancy, the global population of postmenopausal women is projected to reach 1.1 billion by 2025. The physiological and pathological changes associated with menopause significantly impact women's quality of life, leading to various physical and mental health challenges.

**Objective:** This narrative review aims to synthesize existing literature on menopausal symptoms, their treatments, and alternative complementary therapies. It also seeks to identify knowledge gaps to inform future research directions.

**Methods:** A literature review was conducted using PubMed, CINAHL, ScienceDirect, and MEDLINE, covering the period from September 2021 to December 2021. A total of 18 research articles, supplemented by 3 related articles and 2 additional sources, were included.

**Results:** The findings focus on menopausal symptoms, treatments, and alternative therapies, categorized into the following themes: Menopausal symptoms and their association with age. Prevalence and risk factors of menopausal symptoms. Early menopause. Effectiveness of menopausal hormone therapy (MHT) and Alternative and complementary therapies, including yoga, exercise, and hypnosis.

**Conclusion:** Menopause remains underrecognized and inadequately addressed due to societal taboos. Innovative methodological and theoretical approaches are essential to advance research on menopausal health and alternative complementary therapies. These interventions could provide effective management strategies, reducing complications among MHT users and improving overall well-being.

**Keywords:** Menopause, symptoms, MHT, complementary therapies, yoga, hypnosis

### Introduction

Menopause marks the end of a woman's reproductive phase, driven by the reduced secretion of ovarian hormones, leading to the cessation of menstruation after 12 consecutive months. It encompasses various stages, including perimenopause (the transition period around menopause), premenopause (normal fertility before menopause), and postmenopause (the phase starting 12 months after the final menstrual period). The World Health Organization (WHO) projects that by 2030, there will be 1.2 billion postmenopausal women globally, with life expectancy and aging populations on the rise, especially in regions like sub-Saharan Africa and Asia. The average age of menopause varies by ethnicity and geography, ranging from 49.3 years in Taiwan to between 41.9 and 49.4 years in India, influenced by factors such as lifestyle, education, and exposure to endocrine disruptors.

### Impact of Menopause on Health

The reduction in estrogen levels during menopause can cause vasomotor symptoms (hot flashes and night sweats), psychological issues (depression and anxiety), somatic symptoms (joint pain, fatigue), and genitourinary changes (vaginal dryness, pelvic prolapse). These symptoms, collectively referred to as menopausal syndrome or climacteric symptoms, adversely affect women's quality of life. Studies highlight ethnic variations in symptom prevalence; for instance, vasomotor symptoms are more common among Caucasian women, whereas Asian women report somatic symptoms. Other risk factors, including socioeconomic status and lifestyle choices, also influence symptom severity and type.

These symptoms are often exacerbated by aging, leading to sexual dysfunction and a decline in overall mental and physical well-being.

### Menopausal Hormone Therapy (MHT)

MHT remains the most common treatment for managing menopausal symptoms. It has demonstrated effectiveness in alleviating vasomotor symptoms, reducing bone loss, preventing fractures, and improving sexual function. However, its use is associated with potential risks, including breast cancer, cardiovascular disease, and thromboembolic events. Hormonal therapy has been shown to improve lubrication, pain relief, and orgasm in menopausal women, contributing positively to their sexual health. Despite these benefits, the associated risks lead many women to avoid MHT, prompting the need for safer alternatives. The relationship between menopausal symptoms, metabolism, and neuropeptides like orexin A (OxA) is under-researched, presenting opportunities for further study.

### Complementary and Alternative Medicine (CAM)

Due to the limitations of hormone therapy, CAM approaches are gaining traction as safer alternatives. These include herbal therapies, phytoestrogens, acupuncture, yoga, and cognitive behavioral therapy (CBT), which is recognized by NICE for addressing low mood and depression in menopausal women. Non-pharmacological interventions like yoga and exercise show promise in alleviating menopausal symptoms and improving mental health. However, lack of guidance on the appropriate type, duration, and intensity of exercise can lead to ineffective or harmful outcomes, emphasizing the need for tailored interventions and patient education.

### Methodology

This narrative review synthesizes existing literature on menopausal symptoms, their treatments, and alternative complementary therapies to highlight knowledge gaps and inform future research directions. A systematic approach was taken to select and review studies related to menopausal health, focusing on both conventional treatments (such as Menopausal Hormone Therapy or MHT) and alternative therapies.

### Search Strategy

A comprehensive literature search was conducted across multiple databases, including PubMed, CINAHL, ScienceDirect, and MEDLINE. The search covered the period from 2017 to December 2021 to capture the most recent research on menopause. The search terms used included "menopausal symptoms," "menopausal hormone therapy," "complementary therapies," "alternative treatments," "yoga for menopause," and "hypnosis for menopause." Additionally, references from relevant articles were reviewed for further sources.

### Inclusion and Exclusion Criteria

The following criteria were used to select studies for inclusion:

#### Inclusion Criteria

- Studies published between 2017 and December 2021.
- Research on menopausal symptoms, MHT, and alternative therapies (e.g., yoga, exercise, hypnosis).
- Studies with a focus on adult women (ages 40-60) experiencing menopause.
- Both quantitative and qualitative studies were considered, as well as clinical trials, observational studies, and cross-sectional surveys.

#### Exclusion Criteria

- Studies that were not peer-reviewed or were published in languages other than English.
- Articles focusing solely on premenopausal women or those with non-menopausal health conditions.
- Studies with insufficient data or without a clear methodology.

#### Data Collection and Analysis

A total of 18 research articles were included in the final review. In addition, 3 related articles and 2 further relevant sources were consulted to complement the analysis. Data extraction focused on the following aspects:

- **Study Design:** This included the methodological approach (quantitative, qualitative, randomized controlled trials, cross-sectional surveys, etc.) and sample size.
- **Participants:** The demographic details of participants were recorded, such as age range, menopausal status (perimenopausal, postmenopausal), and geographic location.
- **Findings:** Key outcomes related to the prevalence and severity of menopausal symptoms, the effectiveness of MHT, and the impact of alternative therapies (e.g., yoga, exercise, acupuncture).

The studies were analyzed based on their findings, and the key themes were identified across the literature, such as common symptoms, risk factors, and the effectiveness of different treatment approaches.

#### Data Synthesis

Data were synthesized and categorized into several themes to provide a comprehensive overview:

1. **Menopausal Symptoms and Their Prevalence:** This includes physical, psychological, and somatic symptoms and their relationship with factors like age, menopausal stage, and geography.
2. **Effectiveness of Menopausal Hormone Therapy (MHT):** An assessment of MHT in alleviating vasomotor, urogenital, and psychological symptoms, with a focus on safety concerns like cardiovascular risks.
3. **Complementary and Alternative Therapies:** The efficacy of alternative treatments like yoga, exercise, acupuncture, and cognitive behavioral therapy (CBT) in managing symptoms and improving quality of life during menopause.

#### Results and Discussion

**Table 1:** Prevalence and Risk Factors of Menopausal Symptoms Across Studies

Authors	Methodology	Findings
Du <i>et al.</i> , 2020	Research Approach: Quantitative	Mean age: 51 years
	Research Design: Descriptive survey, cross-sectional	Prevalence of symptoms: 73.8%; highest in perimenopausal women (81.7%)
	Population: Middle-aged women (40-60 years)	Common symptoms: Fatigue (38.08%), hot flushes and sweating (33.65%), joint ache (28.81%)
	Sampling Technique: Stratified and quota sampling	Healthcare-seeking behavior: 25.97% sought care
	Setting: Community	KMI scores: Perimenopausal and postmenopausal women scored higher than premenopausal women ( $p < 0.01$ )
	Sample Size: 3,417	Symptom severity: Mild (33.74%), Moderate (16.55%), Severe (1.19%)
	Tool: Structured questionnaire (socio-demographic data, modified Kupperman Menopausal Index [mKMI], healthcare experience)	Factors influencing healthcare-seeking: Employment, menstruation status, and mKMI scores ( $p < 0.01$ ).
Wang <i>et al.</i> , 2021 <sup>[20]</sup>	Research Approach: Quantitative, community-based	Mean age: 46.9 years
	Research Design: Cross-sectional	Prevalence of symptoms: 15.7% overall
	Population: Women aged 40-55 years in eastern, central, and western China	Stage-specific prevalence: Reproductive stage (9.3%), Menopausal transition (23.9%), Postmenopause (21.5%)
	Sampling Technique: Purposive sampling	Common symptoms: Insomnia (44.7%), fatigue (40.4%), mood swings (37.2%)
	Sample Size: 6,745	Risk factors: Menopausal status, residence, nulliparity, and chronic diseases ( $p < 0.05$ )
	Tool: Modified KMI questionnaire and face-to-face interviews (demographics, lifestyle, physical, and menopause characteristics)	Odds ratio for symptoms: Menopausal transition (OR = 2.66), Postmenopause (OR = 2.26).
Choe <i>et al.</i> , 2020 <sup>[2]</sup>	Research Approach: Quantitative	Prevalence: Premature menopause: US (1.7%), Korea (2.8%)
	Research Design: Retrospective comparative	Early menopause: US (3.2%), Korea (7.2%)
	Population: Women aged $\geq 45$ years from the US (NHANES, 1999–2014) and Korea (KNHANES, 2007–2012)	Risk factors: Biological and socioeconomic covariates adjusted
	Sample Size: 9,209 (US) and 9,828 (Korea)	Trends: Korean women had higher rates but showed a consistent decline in prevalence over time ( $p < 0.001$ )
	Tool: National health survey data, face-to-face interviews	Generational effects: Lower risk for premature menopause in later generations (e.g., Korean women born in the 1940s and later).
Yisma <i>et al.</i> , 2017 <sup>[21]</sup>	Research Approach: Quantitative	Mean age: Perimenopausal (38.9 years), Postmenopausal (43.5 years)
	Research Design: Cross-sectional, multi-stage	Prevalence of symptoms: Hot flushes (65.9%), difficulty sleeping (49.6%), depressive mood (46%), irritability (45.1%), anxiety (39.8%)
	Population: Perimenopausal and postmenopausal women (30-49 years) in Gulele sub-city, Addis Ababa, Ethiopia	Stage-specific findings: Postmenopausal women reported higher symptom severity in somatic, psychological, and urogenital categories (e.g., hot flushes in 84% vs. 57% in perimenopausal)
	Sampling Technique: Multistage clustered random sampling	Symptom patterns: Psychological symptoms (depressive mood, irritability) were more pronounced in postmenopausal women.
	Sample Size: 588	
	Tool: Questionnaire (menstrual, menopausal, and sociodemographic data)	
Hajj <i>et al.</i> , 2020 <sup>[9]</sup>	- Quantitative approach, cross-sectional observational study.	- Mean age of participants: 49.5 years ( $\pm 5.7$ SD).
	- Population: Women (40–60 years) from Lebanese provinces.	- Common symptoms: Hot flushes (48.9%), anxiety (68.9%), memory issues (52.9%), muscle/joint pain (72.3%), tiredness (73%), and lower back pain (65%).
	- Setting: Community.	- Symptoms were more prevalent in peri- and postmenopausal women, with sexual disturbances significantly higher among menopausal women ( $p < 0.001$ ).
	- Sampling: Purposive sampling.	
	- Sample Size: 1113 women.	
	- Tool: Arabic version of MENQOL and International Physical Activity Questionnaire.	
Zhang <i>et al.</i> , 2020 <sup>[23]</sup>	- Quantitative approach, cross-sectional study.	- Prevalence of urogenital symptoms was the highest (97.92%), while vasomotor symptoms were the lowest (48.83%).
	- Population: Women aged 40–83 years from 31 Chinese provinces.	- Symptoms increased until age 60, then declined.
	- Setting: Menopausal clinic.	- Risk of symptoms was influenced by menopausal status and age.
	- Sampling: Purposive sampling.	
	- Sample Size: 4595 women.	
- Tool: Modified KMI and face-to-face interviews.		
Ali, 2020 <sup>[1]</sup>	- Quantitative approach, cross-sectional study.	- Common symptoms: Fatigue (65%), lack of energy (median = 4), difficulty sleeping (61.7%), anxiety (58.3%), poor memory (55%), and depression (50%).
	- Population: Peri- and postmenopausal Emirati	- Weight gain experienced by 63.3%.

	women.	
	- Setting: Public healthcare centers in Dubai.	- Vasomotor symptoms were strong predictors of attitudes toward menopause.
	- Sampling: Multistage random sampling.	
	- Sample Size: 70 women.	
	- Tool: Structured questionnaire.	
Kim <i>et al.</i> , 2018 [13]	- Quantitative approach, cross-sectional study.	- Poor sleep quality was strongly associated with vasomotor and physical symptoms ( $\beta = 0.572, P > 0.001$ ).
	- Population: Middle-aged women (44–56 years) in South Korea.	- Psychosocial and sexual symptoms were not significantly related to sleep quality.
	- Setting: Healthcare centers in Seoul and Suwon.	- Poor sleep quality was more prevalent among women with lower education and income levels.
	- Sample Size: 634 women.	
	- Tool: MENQOL and Pittsburgh Sleep Quality Index (PSQI).	
	- Analysis: Multiple linear regression.	

The reviewed studies (Table 1) emphasize the global burden and multifactorial nature of menopausal symptoms, with hot flushes, fatigue, sleep disturbances, psychological issues, and urogenital symptoms being prevalent across diverse populations. The severity and prevalence of these symptoms vary significantly by geographic, cultural, and socioeconomic factors, with perimenopausal and postmenopausal women experiencing more pronounced symptoms than premenopausal women. Key determinants of symptom prevalence and management include menopausal status, age, education, income, and healthcare-seeking behavior. Regional variations, such as higher rates of

premature menopause in Korean women (Choe *et al.*, 2020) [2] and the prevalence of urogenital symptoms in Chinese women (Zhang *et al.*, 2020) [23], underscore the need for tailored healthcare approaches. Psychological and physical symptoms notably affect quality of life, with limited healthcare utilization in some populations (Du *et al.*, 2020). These findings call for culturally sensitive, stage-specific interventions and improved healthcare access, alongside longitudinal and cross-cultural research, to enhance understanding and support evidence-based strategies for managing menopausal health globally.

**Table 2:** Effectiveness of Menopausal hormone therapy among menopausal women.

Study	Methodology	Findings
Swica <i>et al.</i> , 2019 [18]	Study Design: Randomized clinical trials (CEE alone, CEE plus MPA)	- Incidence of hypertension was 18% higher in women assigned to CEE alone compared to placebo (HR 1.18)
	Population: Postmenopausal women aged 50–79 years (n=16,608 for CEE plus MPA, n=10,739 for CEE alone)	- Baseline systolic blood pressure influenced the likelihood of developing hypertension while on estrogen therapy. Women with baseline systolic blood pressure <120 mm Hg were 32% more likely to develop hypertension (HR 1.32)
	Inclusion Criteria: No prior use of hormone therapy, no breast cancer history in the last 10 years, and expected survival rate $\geq 3$ years	- Post-intervention, the risk of hypertension was no longer statistically significant for either CEE or CEE plus MPA.
	Sampling: Randomized assignments to CEE + MPA or CEE/placebo groups	
Hunter <i>et al.</i> , 2020 [12]	Study Design: Qualitative study	- Participants saw HT as a natural substance, helping to maintain femininity and alleviate menopausal symptoms
	Population: Women aged 60+ years, using HT for at least 5 years	- Concerns about sexual health and vaginal dryness were prominent; many women feared cessation of HT would negatively affect their sex lives
	Sampling: 30 women from northern California and a Rocky Mountain region town	- HT was credited for maintaining skin elasticity and a youthful appearance.
	Inclusion Criteria: Women aged 60+, using oral or transdermal HT, able to read and speak English	
	Exclusion Criteria: Severe osteoporosis	
Galas <i>et al.</i> , 2019 [8]	Study Design: Cross-sectional study	- 80.61% of women reported menopausal symptoms, with psychological and urogenital issues being most common (78.23% and 77.21%, respectively)
	Population: 320 Polish women aged 40–65 years	- Women who did not use hormonal therapy experienced more sexual problems
	Sampling: Random selection from women’s health clinics in Silesia	- Sexual problems were particularly prevalent in women without somatic symptoms who were not on HT.
	Data Collection: Demographic data, menopausal symptoms, and sexual function assessed through questionnaires	
	Informed Consent: Voluntary participation, confidentiality assured	

The reviewed studies (table 2) highlight the varied effects of Menopausal Hormone Therapy (MHT) on menopausal

symptoms and women's overall health. Swica *et al.* (2019) [18] found that MHT, especially CEE alone, increased

hypertension incidence, though this risk diminished after the intervention phase, emphasizing the need for blood pressure monitoring. Hunter *et al.* (2020) <sup>[12]</sup> showed that long-term MHT use was perceived as beneficial, particularly for sexual health and maintaining a youthful appearance, with concerns about these aspects if therapy stopped. Galas *et al.* (2019) <sup>[8]</sup> indicated that women not using MHT were more

likely to experience sexual dysfunction, suggesting its crucial role in managing such issues. Overall, MHT is effective for addressing key symptoms like sexual and urogenital health, but its potential cardiovascular risks require individualized approaches. Future research should focus on the long-term effects of MHT and personalized treatment options.

**Table 3:** Alternative and complementary therapy of Menopause.

Study	Methodology	Key Findings
Maharaja <i>et al.</i> (2017)	Explored predictors for CAM/NPI use, focusing on herbal remedies, lifestyle changes, and age.	Age, BMI, and health conditions (high blood pressure, diabetes) negatively impacted CAM/NPI use. Positive predictors included low hopelessness scores, education, and ethnicity.
Lu <i>et al.</i> (2020)	Examined the effects of combining yoga exercise and information support counseling on menopausal symptoms.	Significant reduction in menopausal symptoms, depression, and anxiety in the experimental group; improvement in sleep quality and overall symptom relief compared to control.
Hettchen <i>et al.</i> (2021) <sup>[11]</sup>	Compared high-intensity weight-bearing exercise versus low-intensity exercise in postmenopausal women with osteopenia/osteoporosis.	Bone mineral density (BMD) maintained in the exercise group (EG), while it decreased in the control group (CG). Menopausal symptoms improved more significantly in EG.
Hettchen <i>et al.</i> (2021) <sup>[11]</sup>	Investigated the effects of a multipurpose exercise program on menopausal risk factors and complaints in early postmenopausal women.	BMD at the total hip did not show significant changes, though menopausal symptoms improved, but no significant differences in psychological, somato-vegetative, and urogenital dimensions.
Filipovic <i>et al.</i> (2021) <sup>[7]</sup>	Randomized controlled study on postmenopausal osteoporosis with an exercise intervention (resistance, balance, and aerobic training).	Significant improvements in functional outcomes (TUG, STS, OLST), balance, and fall efficacy observed in the exercise group after 12 weeks.

The studies reviewed (table 3) highlight the positive effects of various interventions, including complementary and alternative medicine (CAM) therapies, exercise programs, and psychological support, on menopausal symptoms and overall health. The study by Maharaja *et al.* (2017) identified key predictors of CAM/NPI use, with age, BMI, and certain health conditions negatively influencing usage, while education and ethnicity positively affected the adoption of CAM treatments. Lu *et al.* (2020) demonstrated that combining yoga with information support significantly reduced menopausal symptoms, anxiety, and depression, highlighting the benefits of a holistic approach to symptom management. Hettchen *et al.* (2021) <sup>[11]</sup> found that high-intensity weight-bearing exercise helped maintain bone mineral density and improved menopausal symptoms more effectively than low-intensity exercise, while a multipurpose exercise program showed improvements in menopausal symptoms, though no significant changes were observed in bone mineral density. Finally, Filipovic *et al.* (2021) <sup>[7]</sup> found that a structured exercise program improved functional outcomes and balance in postmenopausal women with osteoporosis. Overall, these studies emphasize the importance of individualized approaches in managing menopausal symptoms, incorporating physical exercise, psychological support, and complementary therapies to improve both physical and mental well-being during menopause. Future research should continue exploring the long-term effects of these interventions to refine strategies for menopausal care.

## Discussion

### Symptoms in Menopausal Women

This review explored menopausal symptoms across diverse geographic regions, highlighting the variability in prevalence, severity, and contributing factors. Common symptoms such as hot flashes, fatigue, sleep disturbances, and psychological issues were widely reported, with variations in prevalence based on demographic, socioeconomic, and biological factors. For example, Du *et*

*al.* (2020) found fatigue (38.08%) and hot flashes (33.65%) common, while Yisma *et al.* (2017) <sup>[21]</sup> reported higher rates of hot flashes (65.9%). Zhang *et al.* (2020) <sup>[23]</sup> noted the highest prevalence of urogenital symptoms (97.92%), indicating a need for culturally sensitive diagnostic tools.

### Stage-Specific Symptom Variation

Symptom prevalence varied by menopausal stage, with higher symptom rates reported in perimenopausal women. Du *et al.* (2020) and Wang *et al.* (2021) <sup>[20]</sup> found symptom peaks around age 60, while Yisma *et al.* (2017) <sup>[21]</sup> indicated more severe symptoms in postmenopausal women. These findings emphasize the importance of stage-specific interventions and counseling.

### Psychological and Physical Impacts

Psychological symptoms, such as anxiety and depression, were notably impactful on quality of life, particularly in relation to poor sleep quality. Socioeconomic factors, including education and income, influenced symptom severity, highlighting the intersection of physical and social health determinants. As noted by Kim *et al.* (2018) <sup>[13]</sup>, these factors contribute to the overall menopausal experience.

### Healthcare-Seeking Behavior

Despite the severity of symptoms, healthcare-seeking behavior remained low, with only 25.97% of participants in Du *et al.* (2020) seeking care. Employment status, education, and cultural beliefs significantly influenced this behavior, suggesting a need for awareness campaigns to promote healthcare utilization.

### Regional and Generational Differences

Regional variations in menopause onset and symptom prevalence were observed, with Korean women experiencing higher rates of early menopause compared to U.S. women, as noted by Choe *et al.* (2020) <sup>[2]</sup>. Generational improvements reflect evolving societal norms and healthcare access.

### Effectiveness of Menopausal Hormone Therapy (MHT)

MHT demonstrated significant benefits in alleviating symptoms such as sexual dysfunction, vaginal dryness, and skin changes. Hunter *et al.* (2020)<sup>[12]</sup> found that women on MHT experienced improved sexual health and viewed it as a necessary treatment. However, Swica *et al.* (2019)<sup>[18]</sup> revealed a higher incidence of hypertension among MHT users, particularly affecting systolic blood pressure. This suggests the need for careful cardiovascular monitoring during therapy. Galas *et al.* (2019)<sup>[8]</sup> also highlighted MHT's positive impact on sexual health, especially in women who did not use hormone therapy, indicating its potential role in improving quality of life. Despite its benefits, MHT carries risks, especially in cardiovascular health, underscoring the need for personalized approaches in treatment.

### Alternative and Complementary Therapies

Studies emphasized the value of alternative and complementary therapies (CAM) in managing menopausal symptoms. Maharaja *et al.* (2017) found that factors like education and ethnicity influenced the use of CAM, highlighting the role of socioeconomic factors in treatment choices. The intervention by Lu *et al.* (2020) combining yoga and psychological support demonstrated significant improvements in both physical and mental health, particularly in reducing anxiety and depression. Hettchen *et al.* (2021)<sup>[11]</sup> showed that high-intensity weight-bearing exercises were more effective in maintaining bone mineral density (BMD) and alleviating menopausal symptoms compared to low-intensity exercises. This suggests that more intensive exercise protocols may be necessary to optimize bone health. Filipovic *et al.* (2021)<sup>[7]</sup> further supported exercise interventions by demonstrating improvements in functional outcomes, such as balance and fall risk, though BMD was not significantly impacted.

### Limitations

The review is limited by the relatively narrow timeframe of selected studies, focusing on research from 2017 to December 2021. Additionally, while the review includes a variety of studies, it does not conduct a meta-analysis, and thus some degree of heterogeneity in study design and sample characteristics may influence the generalizability of the findings. The studies reviewed were primarily cross-sectional and observational, which may limit the ability to establish causal relationships. Further research, especially longitudinal and clinical trial studies, is needed to draw more definitive conclusions about the effectiveness of various treatments for menopausal symptoms.

### Conclusion

In conclusion, menopause remains a significant phase in a woman's life, marked by various physical, psychological, and urogenital symptoms that can impact overall quality of life. The studies reviewed highlight the global prevalence and variability of these symptoms, with factors such as age, socioeconomic status, and ethnicity influencing both their severity and management. Menopausal hormone therapy (MHT) remains a widely used treatment, offering relief for many symptoms, especially sexual and urogenital health issues. However, the potential risks associated with MHT, particularly cardiovascular concerns, underscore the need for individualized treatment approaches.

Alternative and complementary therapies (CAM), such as yoga, exercise, and herbal remedies, have shown promising results in alleviating symptoms and improving overall well-being, offering women safer options when MHT is not suitable. The effectiveness of these therapies, however, depends on factors such as the type, duration, and intensity of the intervention, as well as the individual's health status. The findings suggest that a holistic approach, integrating both pharmacological and non-pharmacological treatments, is crucial for managing menopause effectively.

Overall, more research is needed to address existing knowledge gaps, refine treatment protocols, and develop culturally sensitive, stage-specific interventions to support women through this life transition, enhancing their health outcomes and quality of life.

### Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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