

## Selección de Resúmenes de Menopausia

Semana del 14 al 20 de enero, 2026

María Soledad Vallejo. Obstetricia y Ginecología. Hospital Clínico. Universidad de Chile

**Clin Appl Thromb Hemost. 2026 Jan-Dec;32:10760296251414114. doi: 10.1177/1076029625141411**

### Global, Regional, and National Burden of Atherosclerotic Cardiovascular Disease in Pre- and Post-Menopausal Women: 1990-2021 Trends and 2041 Projections from the Global Burden of Disease Study

Jie Tan 1 2, Zhiyu Zhang 1, Shouying Xiang 2, Fei Zhang 3, Heng Zhu 1 4, Li Xu 5, Jing Huang 1

-27

**Background** The global burden and temporal trends of atherosclerotic cardiovascular disease (ASCVD) stratified by menopausal status have not been comprehensively described. Methods Age-standardized incidence rates (ASIR), prevalence rates (ASPR), disability-adjusted life year rates (ASDALYR), and death rates (ASDR) for ASCVD, including ischemic heart disease (IHD), ischemic stroke (IS), and lower extremity peripheral artery disease (LEPAD), were estimated among pre- and post-menopausal women from 1990 to 2021 using data from the Global Burden of Disease Study 2021. Temporal trends were quantified using average annual percent change, and the population attribution fractions were calculated for established ASCVD risk factors. Projections to 2041 were generated using the Nordpred model. Results In 2021, the highest IHD burden was observed in low-middle socio-demographic index (SDI) regions, whereas the highest LEPAD burden occurred in high SDI regions among both pre- and post-menopausal women. Among premenopausal women, ASIR and ASPR for IS demonstrated a negative correlation with SDI level. Between 1990 and 2021, premenopausal women exhibited increases in IHD ASIR (12.86%) and ASPR (11.43%), accompanied by reductions in ASDALYR (23.97%) and ASDR (24.35%). In contrast, postmenopausal women experienced a modest increase in ASPR (4.14%) along with declines in ASIR (10.61%), ASDALYR (34.99%), and ASDR (37.09%). The contribution of specific risk factors varied by menopausal status: elevated low-density lipoprotein cholesterol, systolic blood pressure, and body mass index were predominant among premenopausal women, whereas elevated fasting glucose and kidney dysfunction contributed more substantially among postmenopausal women. Projections to 2041 indicate continued increases in ASCVD incidence and prevalence numbers, particularly among postmenopausal women. Conclusions: The burden of ASCVD varies significantly by menopausal status and across socio-demographic regions. Age-specific and regionally targeted screening, prevention, and resource allocation strategies are warranted to address the projected rise in ASCVD among women.

**Eur J Obstet Gynecol Reprod Biol X. 2025 Dec 23:29:100440. doi: 10.1016/j.eurox.2025.100440. eCollection 2026**

### The benefits of testosterone therapy for menopausal symptoms

Jillian Chan 1, Julia Cunningham 1, Colin Cunningham 1, John Cunningham 1, Catherine Cunningham 2

**Objectives:** This study will address the effects of testosterone pellet therapy in menopausal women treated over a ten-year period. **Study design:** A retrospective review of a single gynecologic practice was performed to evaluate patients treated with subcutaneous testosterone pellet therapy for androgen deficiency. Consent was obtained from all patients before pellet placement. Women completed a menopause rating scale (MRS) questionnaire prior to starting therapy and before the third pellet placement. Patients were treated every 3 months. Blood work was obtained prior to treatment, before the third pellet insertion and then yearly. Non-parametric analysis was performed using the Wilcoxon signed-rank test and the Bonferroni test was used to correct for comparisons across multiple domains. A p value of less than 0.05 was considered significant. **Main outcome measures:** Scores on the MRS were calculated as medians and compared from the initial MRS to the subsequent MRS questionnaire. Patient's age and peak testosterone levels were used to evaluate the effect of therapy on menopausal symptoms. Side effects from therapy were noted at follow-up visits. **Results:** There were 78 patients who completed both MRS questionnaires. A comparison of results from the initial and subsequent MRS questionnaire showed that median scores were significantly reduced in all eleven categories of symptoms. Scores improved in all categories of patient age and peak testosterone levels. The most common side effects were acne and facial hair. These were treated with dose reduction and or spironolactone therapy.

Conclusions: The use of testosterone pellet therapy in women with androgen deficiency results in rapid and sustained relief of menopausal symptoms in all age groups and at all testosterone levels. Further studies are needed to optimize the use of testosterone in women with menopausal

**Rev Assoc Med Bras (1992). 2026 Jan 9;71(12):e20251068. doi: 10.1590/1806-9282.20251068. eCollection 2026.**

## **The relationship between spousal support and quality of life in postmenopausal women: a cross-sectional study**

Sevinç Köse Tuncer 1, Papatya Karakurt 1, Selen Özdemir 1, Sonay Bilgin 2

Objective: In today's world, with the prolongation of human life span, a significant part of women's lives is spent in the menopausal period. Factors that negatively affect the health and quality of life of women experiencing this process constitute an important problem in terms of women's health. The aim of this study was to determine the relationship between spousal support and quality of life among menopausal women. Methods: The cross-sectional study was conducted with 300 women aged 45-65 years, who were in menopausal period and volunteered to participate in the study, registered in four family health centers located in eastern Türkiye. The data were collected using the "Personal Information Form," "Menopause Spousal Support Questionnaire," and "Menopause-Specific Quality of Life Questionnaire." Results: The mean total score of the women on the spousal support questionnaire was  $116.39 \pm 17.88$ . In the subdimensions, the highest score belonged to valuing support ( $41.35 \pm 7.21$ ) and the lowest score belonged to sexual intimacy support ( $21.52 \pm 3.91$ ). Quality of life questionnaire subfield mean scores were as follows: vasomotor  $5.43 \pm 3.24$ , psychosocial  $10.83 \pm 5.23$ , physical  $17.84 \pm 13.03$ , and sexual  $2.02 \pm 3.16$ . Spousal support and quality of life levels differed significantly according to demographic characteristics ( $p < 0.05$ ). Conclusion: Increased support from husbands decreases menopause-related complaints and improves quality of life. On the other hand, smoking, irregular exercise, not receiving hormone therapy, and a lack of information increase complaints. The results show that spousal support and healthy living habits are determinants of quality of life during menopause.

**Cureus. 2025 Dec 14;17(12):e99210. doi: 10.7759/cureus.99210. eCollection 2025 Dec.**

## **Comparative Effects of Hormone Replacement Therapy and Exercise on Bone Health in Postmenopausal Women: A Systematic Review**

Marcela Treviño 1, Payton Leiker 1, Sainamitha R Palnati 1, Saajan Bhakta 2

Postmenopausal women are at increased risk of bone loss and fractures. This review compares hormone replacement therapy (HRT) and weight-bearing exercise in their ability to preserve bone mineral density (BMD), a key factor in osteoporosis prevention. A systematic review of HRT and weight-bearing exercise therapy in postmenopausal women was conducted from February 24, 2025, to April 5, 2025, across six electronic databases. A full-text screening was completed by two independent reviewers following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Six studies were included according to the inclusion criteria, such as publication date, study format, intervention type, primary outcome, and follow-up duration. Data was extracted using Microsoft Excel (Microsoft Corp., Redmond, WA, USA), and a risk-of-bias assessment was completed. Postmenopausal women may benefit from HRT, as there were greater improvements in BMD than exercise therapy alone and a decreased risk of fracture at sites such as the hip and vertebrae. Exercise interventions, particularly resistance-based or mixed-loading programs, also demonstrated improvements in BMD, although results varied depending on the type and intensity of exercise. Findings were varied and not uniformly superior to either intervention alone. There is also limited evidence evaluating the possible additive benefits of combined therapy. Additionally, discontinuing HRT after beginning it resulted in a decline in BMD, suggesting discontinuation is non-neutral. Both HRT and weight-bearing exercise therapy were associated with improvements in BMD in postmenopausal women, with HRT resulting in greater increases than exercise alone. Exercise remains an important non-pharmacologic strategy, and combination therapy may provide an additive benefit, particularly at high-risk fracture sites such as the lumbar spine and hip, although further research is needed to clarify these effects.

**Sports Med Open. 2026 Jan 14;12(1):5. doi: 10.1186/s40798-025-00954-2.**

## Analysis of the Additive Effects of Nutritional Strategies in Strength Training Interventions on Body Composition, Muscle Strength and Bone Mineral Density in Postmenopausal Women: A Systematic Review

Franziska Walter 1, Jan Schalla 2, Wilhelm Bloch 1, Patrick Diel 1, Stephan Geisler 2, Eduard Isenmann 3 4

**Background:** During menopause, women experience a range of physiological changes, including reduction in skeletal muscle mass, bone mineral density, and an increase in fat mass. Although strength training and dietary strategies have individually been shown to counteract these changes, evidence for their combined effects is currently lacking. This review aims to investigate the combinatory effects on body composition, muscle strength, and bone mineral density. **Methods:** Three databases (PUBMED, Web of Science, and SPORTDiscus) were screened following the PRISMA guidelines. The PEDro scale was utilized to evaluate methodological quality and potential bias risk. The analyzed outcome parameters were body composition, muscle strength, and bone mineral density. **Results:** A total of 34 studies including postmenopausal women (N = 1,541) were identified; 31 of these had a PEDro score of 6 or higher. In general, body composition, muscle strength, and bone mineral density have been significantly altered through systematic strength training. Eleven studies focused on an additional calorie deficit (250-750 kcal/day) which enhanced the reduction of fat mass. Protein intake was examined in nine studies and has no significant additional effect on muscle strength and lean body mass with a minimal intake of 0.8 g/kg bodyweight. Only a few studies could be identified on other nutritional and supplementation strategies. A total of three studies were identified investigating strength training in conjunction with amino acid supplementation, four studies examining calcium and vitamin D, four studies on creatine, one study on zataria multiflora, one study on omega-3 supplementation and one study on shatavari. **Conclusion:** Systematic strength training has been consistently demonstrated to improve body composition, strength capacity, and bone mineral density. However, the evidence supporting the effectiveness of additional nutritional and supplementation strategies remains inconclusive. While a calorie-restricted diet and adequate protein intake appear to promote favourable changes in body composition, the available data is still insufficient to derive specific and evidence-based recommendations regarding supplementation in conjunction with strength training. Moreover, research on additional nutritional and supplementation strategies remains inconsistent or scarce, underscoring the need for further studies to allow for more precise recommendations.

**Menopause. 2026 Jan 13. doi: 10.1097/GME.0000000000002725. Online ahead of print.**

## Associations between vasomotor symptoms, sleep disturbances, and frequent mood changes individually and within symptom groups across the menopausal transition and early postmenopause: observations from the Study of Women's Health Across the Nation

Pauline M Maki 1, Elif Inan Eroglu 2, Cecile Janssenswillen 3, Ann-Kathrin Frenz 2, Simone Heeg 2, et al.

**Objective:** To explore associations between vasomotor symptoms (VMS), sleep disturbances, and frequent mood changes, and predictors of each, in women transitioning menopause. **Methods:** Data were analyzed from the baseline and first 10 annual follow-up visits (1996-2008) from 2,066 participants in the Study of Women's Health Across the Nation who had reached natural menopause. The visit closest to the final menstrual period (FMP) was considered as FMP 0; visits 5 years before/after were relabeled accordingly. Associations between symptoms over time were determined using generalized additive mixed models (GAMMS, for individual symptoms). Predictors of symptom groups were determined using Bayesian multinomial regression. **Results:** Prevalence of VMS and sleep disturbances increased up to FMP+1, remaining >50% thereafter; frequent mood changes gradually decreased (47%-33%). In the GAMMs, VMS and sleep disturbances were each associated with double the odds of the other, and VMS and frequent mood changes were associated with ~50%-60% increased odds of the other. In the Bayesian models, the probability of experiencing VMS and sleep disturbances together increased with increasing age at FMP (~1.3 percentage points/year); the strongest predictors of experiencing all symptoms concurrently were high level of depression (an increase of 10 percentage points per 10-point increase in depression score) and high anxiety (46% vs. 15% probability for low anxiety). **Conclusions:** Our findings underscore the importance of identifying, monitoring and addressing VMS, sleep disturbances, and frequent mood changes specifically and collectively, and support a personalized approach to menopausal symptom management, with anxiety and depression being important considerations.

**Menopause. 2026 Jan 13. doi: 10.1097/GME.0000000000002723. Online ahead of print.**

## **Tailoring transdermal estradiol dose to maximize benefits and minimize risks**

Sarah J Glynne 1, James A Simon 2

Transdermal estradiol is licensed to treat estradiol deficiency symptoms and prevent osteoporosis in postmenopausal women. There is no one-size-fits-all estradiol dose or serum concentration that will achieve symptom relief and bone protection in all women. Dose is usually titrated to symptom response, but measurement of serum estradiol concentration can be used to support or inform dose decisions in certain clinical scenarios. The optimal level for an individual varies according to tissue sensitivity (pharmacodynamic effects), the method used for estradiol quantitation (immunoassay vs. mass spectrometry), the clinical endpoint (symptoms vs. bone protection), and treatment goals, including patient preferences. An understanding of transdermal estradiol pharmacokinetics and pharmacodynamics, and the limitations of the methods used to measure serum estradiol, is essential to ensure that all women who choose to use menopausal hormone therapy (MHT) can reap the benefits and avoid the harms of over-treatment and under-treatment. Achieving and maintaining optimal estradiol levels for all MHT users is consistent with menopause guidelines that promote high-quality, patient-centred, personalized menopause care.