

## Selección de Resúmenes de Menopausia

Semana del 10 a 16 de septiembre, 2025

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

**Nutrients. 2025 Sep 6;17(17):2885. doi: 10.3390/nu17172885.**

### Systemic Inflammation Indices, Chemokines, and Metabolic Markers in Perimenopausal Women

Anna Maria Cybulska 1, Kamila Rachubińska 1, Elżbieta Grochans 1, Mateusz Bosiacki 2, Donata Simińska 2, et al. Background: Menopause and metabolic syndrome (MetS) are linked to chronic low-grade inflammation. However, the role of chemokines and systemic inflammatory indices such as the systemic immune-inflammation index (SII) and systemic inflammatory response index (SIRI) in perimenopausal women remains poorly understood. Methods: This cross-sectional study evaluated inflammatory markers, chemokines, and systemic indices in perimenopausal women recruited in Poland. Sociodemographic and health-related information was obtained using a custom questionnaire, along with anthropometric measurements and laboratory analyses. Results: A total of 230 women aged 44-65 years were included. Women with BMI  $\geq 25$  kg/m<sup>2</sup> had significantly higher IL-6 (median 4.9 vs. 2.3 pg/mL,  $p < 0.01$ ) and CRP levels (3.8 vs. 1.6 mg/L,  $p < 0.05$ ), as well as increased HOMA-IR (2.6 vs. 1.5,  $p < 0.01$ ), compared with those with normal BMI. Positive correlations were found between SII and CXCL5 ( $r = 0.21$ ,  $p = 0.01$ ), and between SIRI and CXCL2 ( $r = 0.19$ ,  $p = 0.02$ ), CXCL5 ( $r = 0.23$ ,  $p = 0.01$ ), and CXCL9 ( $r = 0.24$ ,  $p = 0.01$ ). Conclusions: Excess body weight in perimenopausal women was associated with elevated IL-6, CRP, and insulin resistance, together with BMI-dependent correlations of chemokines with SII and SIRI. These findings highlight the potential of SII and SIRI as accessible screening tools for identifying women at risk of MetS. Future longitudinal studies are needed to confirm their predictive value and clinical applicability.

*Nota: Las quimioquinas son un grupo de pequeñas proteínas señalizadoras (citoquinas) cuya función principal es dirigir el movimiento de las células del sistema inmunitario hacia sitios específicos del organismo.*

**Climacteric. 2025 Sep 12:1-19. doi: 10.1080/13697137.2025.2548806. Online ahead of print.**

### The role of lifestyle medicine in menopausal health: a review of non-pharmacologic interventions

Chika V Anekwe 1 2, Antonio Cano 3, Jennifer Mulligan 1 2, Seng Bin Ang, Corinne N Johnson, Nick Panay, et al. Objective: Menopause, typically occurring between ages 45 and 55 years, is a natural life stage marked by hormonal changes that can affect the symptom burden, quality of life and chronic disease risk. While not a disease, the transition often requires individualized, holistic care. Lifestyle medicine - encompassing healthy eating, physical activity, mental well-being, avoidance of risky substances, restorative sleep and healthy relationships - offers a promising non-pharmacological strategy to optimize health during this period. Method: A systematic literature search was conducted in PubMed, Embase, Scopus and Web of Science (January 2000-December 2024) using the following keywords and combinations: 'menopause', 'lifestyle medicine', 'healthy eating', 'physical activity', 'mental wellbeing', 'avoidance of risky substances', 'restorative sleep', 'healthy relationships', 'weight management', 'chronic disease prevention', 'health equity and access' and 'general health frameworks'. Peer-reviewed human studies in perimenopausal, menopausal or postmenopausal women evaluating one or more lifestyle medicine pillars were included. Data were extracted on study design, population, interventions, outcomes and main findings. Results: Lifestyle medicine interventions were associated with reductions in vasomotor symptoms, improved sleep quality, enhanced mental well-being, healthier weight regulation, and reduced cardiometabolic and osteoporosis risk. Multidisciplinary, person-centered approaches improved adherence and patient-reported outcomes. Strategies were cost-effective, adaptable and beneficial for long-term disease prevention across diverse populations. Conclusion: Lifestyle medicine offers a foundational, evidence-based framework for equitable menopause care. Integrating these strategies into clinical guidelines and public health policy can improve quality of care, empower women to manage their health and reduce disparities in access. Collaborative action among healthcare providers, policymakers and communities is essential to maximize impact.

**J Womens Health (Larchmt). 2025 Sep 9. doi: 10.1177/15409996251374597. Online ahead of print.**

## Parity, Age at Childbirth, and Later-Life Health-Related Quality of Life in Postmenopausal Women

Zailing Xing 1, Amy C Alman 1, Henian Chen 1, Mary Ashley Cain 2, Russell S Kirby 1 3

**Objective:** We aimed to examine the long-term effects of parity, age at first childbirth, and age at last childbirth on later-life health-related quality of life (HRQoL) in postmenopausal women. **Materials and Methods:** The Women's Health Initiative data included 15,416 postmenopausal women with repeated measures in HRQoL. We used propensity score matching to create matched samples, where each exposure group was matched with a reference group based on their propensity scores. We employed mixed-effects models to examine the associations of parity and age at childbirth with HRQoL. We performed multiple mediation analyses to assess the effects of potential mediators on the associations. **Results:** The overall HRQoL scores of women with parity of 4 and 5+ compared to parity of 2 significantly increased by 1.4 (95% confidence interval [CI]: 0.56-2.24) and 1.3 (95% CI: 0.36-2.24), respectively. Having the last childbirth after 40 was associated with increased overall HRQoL by 2.2 (95% CI: 0.50-4.4). However, the HRQoL for women with age at first childbirth of <20 was reduced by 2.7 (95% CI: 1.66-3.74) compared to age at first childbirth of 25-29. In multiple mediation analyses, we identified the path: age at first childbirth of <20 → premature menopause → reduced HRQoL. **Conclusions:** The mixed-effects models demonstrated that age at first childbirth of <20 was related to decreased HRQoL over time, while parity of 4 and ≥5 and late age at last childbirth were associated with increased HRQoL. Premature menopause significantly mediated the association between young age at first childbirth and reduced HRQoL.

**Climacteric. 2025 Sep 10:1-10. doi: 10.1080/13697137.2025.2548802. Online ahead of print.**

## The value of over-the-counter products/services in the management of mild-to-moderate menopausal symptoms

Petra Stute 1, Heather Currie 2, Santiago Palacios 3

For women with mild-to-moderate menopausal symptoms, lifestyle changes and over-the-counter products and services can be beneficial for symptom management, especially for those who are contraindicated or averse to using menopausal hormone therapy (MHT). Lifestyle changes, such as increased exercise and improvements in diet, enhance overall health and are suggested by some low-level evidence - largely from observational studies - to alleviate menopausal symptoms. Over-the-counter dietary and herbal supplements are a popular alternative to MHT. While evidence is mainly low-level, some of these products have shown efficacy and tolerability in menopausal symptom management through meta-analyses, systematic reviews and randomized controlled trials (RCTs). However, mixed evidence and inconsistencies in product dosage, components and quality remain an issue. In addition, caution is advised for women on other medications or with conditions such as breast cancer that could interact with or be impacted by these products. There is high-level evidence from RCTs supporting the efficacy of behavioral therapies, in particular cognitive behavioral therapy, in menopausal symptom management, and clinicians should consider their implementation. Education on menopause and its management is essential. The authors recommend a three-step approach for treating women with self-reported mild-to-moderate menopausal symptoms who prefer to avoid prescription medications even after being informed about their benefit-risk profiles: 1) lifestyle changes; 2) non-prescription options and over-the-counter products; and 3) prescription therapies, if still necessary and with patient agreement. This approach broadens access to menopausal symptom management, providing relief to a wide range of women.

**Womens Health Rep (New Rochelle). 2025 Sep 2;6(1):791-802. doi: 10.1177/26884844251372014.**

## Views of Menopause and Hormone Therapy Associations with Hormone Therapy Use in US Women Aged 50-79

Sushmita Chopra 1, Dokyung Yoon 1, Teal Eich 1

**Objective:** To explore symptoms, knowledge levels, perceptions, and use related to menopause and hormone therapy (HT) and to examine the factors associated with HT use and HT perceptions in perimenopausal and postmenopausal women. **Materials and methods:** We used a sample of 98 perimenopausal and postmenopausal women who aged 50-79 and participated in the Sex, ApoE-4,  $\gamma$ -aminobutyric acid, and Episodic memory (SAGE) study (M age = 64.24, standard deviation = 7.49). We applied a series of bivariate Firth logistic regressions to examine the associations of each variable of interest with hormone therapy (HT) use and perceptions. **Results:** Overall, 89.90% reported positive perceptions of menopause, and 85.71% had positive perceptions of HT. One-third (32.65%) of the sample had used

HT. Hot flashes (72.4%) were the most reported menopausal symptom. Logistic regression analyses showed that age, race/ethnicity, current drinking status, menopausal knowledge levels, and vasomotor and genitourinary symptoms were significantly associated with HT use, while race/ethnicity, current drinking status, menopausal knowledge levels, and genitourinary symptoms were also linked to positive HT perceptions. Hispanic participants reported lower menopausal knowledge, less positive HT perceptions, and lower HT use. Conclusions: The majority of women in the SAGE cohort reported positive perceptions of both menopause and HT. Race/ethnicity, along with current drinking status, menopausal knowledge levels, and genitourinary symptoms, were consistently associated with both HT use and HT perceptions. Ethnic differences in menopausal knowledge levels, HT perceptions, and HT use are also discussed.

**Menopause. 2025 Sep 9. doi: 10.1097/GME.0000000000002630. Online ahead of print.**

## **Trends in obesity among premenopausal and postmenopausal women in the United States between 1999 and 2018: results from the National Health and Nutrition Examination Survey**

Claire E Cook 1, Chris Kim, Mahrukh Abid, Alexandra Wasser, Hailey R Banack

**Objective:** The objective of the present work is to: (1) describe the trends in obesity among premenopausal and postmenopausal women in the United States between 1999 and 2018, and (2) describe the effect of aging on body mass index in women, using novel BMI-for-age percentile curves. **Methods:** Data from the National Health and Nutrition Examination Survey (NHANES) collected between 1999 and 2018, including self-identified female participants older than 20 years, was used. Menopause status was self-reported, and body mass index (BMI, kg/m<sup>2</sup>) was calculated based on measured height and weight. Mean BMI across year is described according to menopause status and race/ethnicity. BMI-for-age percentiles and curves were created to describe adult BMI in the context of age. **Results:** Mean BMI among premenopausal women increased from 27.7 (7.1) kg/m<sup>2</sup> in 1999 to 30.2 (8.8) kg/m<sup>2</sup> in 2018. In postmenopausal women, mean BMI increased from 28.7 (6.2) kg/m<sup>2</sup> in 1999 to 29.7 (7.1) kg/m<sup>2</sup> in 2018. Among premenopausal women, BMI values in the 50th percentile range from 25.0 kg/m<sup>2</sup> at age 20 to 28.6 kg/m<sup>2</sup> at age 60. Among postmenopausal women, BMI values in the 50th percentile range from 27.1 kg/m<sup>2</sup> at age 41 to 28.3 kg/m<sup>2</sup> at age 60, and 26.5 kg/m<sup>2</sup> at age 80. **Conclusions:** The present findings describe an increase in BMI by both calendar year and chronological age during the years before menopause leading to higher BMI levels among postmenopausal women. These findings highlight the premenopausal period and the menopause transition as an important opportunity for obesity screening, identification, and prevention.

**Menopause. 2025 Sep 9. doi: 10.1097/GME.0000000000002633. Online ahead of print.**

## **Impact of sleep disturbances on health-related quality of life in postmenopausal women: a systematic review**

Claudio N Soares 1, Malek Bajbouj 2, Nils Schoof 3, Amit Kishore 4, Cecilia Caetano 5

**Importance:** Sleep disturbances are common during and after the menopause transition, with potential effects on morbidity and quality of life; however, they may be underdiagnosed and undertreated. **Objective:** We carried out a systematic literature review to investigate the prevalence and impact of sleep disturbances associated with menopause on women's health-related quality of life across the stages of menopause. **Evidence review:** Searches were conducted in PubMed and Excerpta Medica Database to identify articles published between 2013 and 2023 containing evidence for the impact of sleep quality on health-related quality of life and the epidemiology of sleep disturbances in women in menopause. **Findings:** In total, 29 publications focusing on epidemiological outcomes of sleep disturbances and 28 studies focusing on the impact of sleep quality on health-related quality of life were identified. Overall, these studies confirmed the high prevalence of sleep disturbances in postmenopausal women. Risk factors for sleep disturbances included menopausal status, depression, vasomotor symptoms, high glycemic index diets, and age. Notably, sleep disturbances were identified even in the absence of vasomotor symptoms. Sleep disturbances were significantly associated with impaired menopause-specific and general health-related quality of life, including depression, anxiety, and musculoskeletal pain. Sleep disturbances were also associated with reduced work productivity and the ability to perform daily activities. **Conclusions and relevance:** Healthy sleep is important at all life stages, including during menopause. Our review indicates that sleep disturbances are highly prevalent during postmenopausal years, even among women without vasomotor symptoms, and can severely impact women's well-being and quality of life. This study highlights the importance of promoting increased awareness and developing tailored treatment strategies for sleep disturbances in midlife and beyond.