

Menopause

Current Awareness Bulletin

August 2026

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Are you looking for a bite-size bulletin that focuses on the staff experience of menopause and its symptoms?

Contact Helen Clemow at Salisbury NHS Foundation Trust to receive a blend of news and information based on topics discussed at their *Menopause Tea and Talk* sessions:
helen.clemow@nhs.net

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Call for participation: surveys

International Menopause Society survey: ovarian ageing, menopause, premature ovarian insufficiency and genetics

The team are looking for healthcare professionals, researchers, trainees, consumer advocates and other professionals with an interest in ovarian ageing, menopause, POI and genetics.

More information: <https://thebms.org.uk/2026/07/international-menopause-society-survey-ovarian-ageing-menopause-premature-ovarian-insufficiency-and-genetics/>

Have your say on VVA: a new survey for healthcare professionals

Healthcare professionals who see menopausal women with vulvo-vaginal atrophy (VVA), as part of genitourinary syndrome of menopause (GSM), are invited to take part in a new University of Melbourne survey exploring how this condition is diagnosed, discussed and treated in practice.

More information: <https://thebms.org.uk/2026/07/have-your-say-on-vva-a-new-survey-for-healthcare-professionals/>

Guidelines

Updated Guidance Regarding The Role of Transvaginal Ultrasonography in Evaluating the Endometrium of Individuals With Postmenopausal Bleeding

Authors: American College of Obstetricians & Gynecologists

Publication Date: 2026

“This document is a focused update of related content in Committee Opinion No. 734, *The Role of Transvaginal Ultrasonography in Evaluating the Endometrium of Women With Postmenopausal Bleeding*”.

Available from:

<https://www.ovid.com/jnls/greenjournal/fulltext/10.1097/aog.0000000000006275~updated-guidance-regarding-the-role-of-transvaginal>

Menopausal hormone therapy and comprehensive postmenopausal care in gynecologic cancer survivors: A position paper from the FIGO Committee on Women at Menopausal Age.

Authors: FIGO Committee on Women at Menopausal Age

Publication Date: 2026

Available from: <https://doi.org/10.1002/ijgo.71188>

'Healthy menopause': The European menopause and andropause society (EMAS) 2026 framework for precision, digital, and interdisciplinary midlife health.

Authors: EMAS

Publication Date: 2026

Available from: <https://doi.org/10.1016/j.maturitas.2026.109060>

Research

1. Menopause as a factor in psychological, behavioural and cognitive changes in women with learning disabilities.

Authors: Adams D.;Sawhney I. and Shah, C.

Publication Date: 2026

Journal: Learning Disability Practice 29(3)

Abstract: The menopause presents unique challenges for women with learning disabilities but it is often overlooked or misdiagnosed in this population. Unrecognised and untreated menopausal symptoms can trigger behaviour that challenges, potentially leading to the inappropriate prescribing of psychotropics. Diagnostic overshadowing must be avoided, but it is also important to recognise that psychological, behavioural and cognitive changes in women with learning disabilities from their late thirties or early forties onwards do not necessarily stem from hormonal fluctuations. This article explores the menopause in women with learning disabilities, highlighting the risks of diagnostic overshadowing, incomplete differential diagnosis and inadequate support. Learning disability nurses have a pivotal role in helping service users and their families and carers to recognise and manage menopausal symptoms. Useful strategies include developing a proactive and individualised care plan for each woman approaching perimenopausal age, providing information in accessible formats, and educating families, carers and other health and social care professionals.

2. Co-designing a culturally appropriate mHealth physical activity intervention for midlife women experiencing menopause in Saudi Arabia: stakeholder recommendations.

Authors: AlSwayied G.;Frost R. and Hamilton, F. L.

Publication Date: 2026

Journal: BMC Public Health 26(1) Article Number: 2018.

Abstract: Background: Promoting Physical activity (PA) is a public health priority, with regular engagement associated with improved psychosocial and physical outcomes during

menopause. Despite these benefits, adherence to PA guidelines among midlife women remains low globally, a pattern particularly pronounced in conservative contexts such as Saudi Arabia. mHealth presents a promising opportunity for supporting PA behaviour change at scale, yet effective engagement requires interventions aligned with women's needs and preferences. This study aimed to co-generate and prioritise actionable recommendations for a contextually tailored mHealth PA intervention for midlife Saudi women experiencing menopause.

Method(s): This study employed an exploratory qualitative design guided by the Generative Co-design Framework for Healthcare Innovation. Online group-based workshops were conducted between May and October 2024. In the first round, four co-ideation workshops were held with homogeneous groups of potential end-users (midlife Saudi women) and professionally diverse stakeholders relevant for intervention development, using storyboards to elicit women's perspectives of PA-related needs and challenges. The second round involved a cross-sectoral co-prioritisation workshop using a consensus-building matrix. Workshops were audio-recorded, transcribed, and analysed using inductive qualitative content analysis. Stakeholder-generated recommendations were subsequently mapped onto the COM-B model and Behaviour Change Wheel (BCW). **Result(s):** Twenty-three stakeholders participated across five co-design workshops, including midlife Saudi women (n = 3), various healthcare providers (HCPs) (n = 14), policymakers (n = 2), fitness trainers (n = 3), and an app developer, each participating in at least one workshop. Agreed priorities included tailored educational modules on menopause and PA, a home-based adaptable exercise library, empathetic messaging framing PA as self-care, progress tracking and feedback, personalisation options, and social and community support features. Cultural tailoring was identified as essential across all components. Stakeholders also recommended an ecosystem approach to implementation, encompassing technical training and intergenerational family digital support to enhance digital skills and inclusion, integration with existing health systems and HCP endorsement, and cross-sectoral partnerships to support uptake and sustainability. **Conclusion(s):** This study represents one of the first applications of a structured participatory co-design approach to digital health intervention development within the Saudi Arabian context. The co-design process proved feasible and acceptable and generated culturally grounded insights for a population that remains underrepresented in health research. The findings provide a foundation and practical direction for intervention content, design features, and implementation strategies aligned with women's lived experiences and sociocultural context. The necessary next steps are prototype development and feasibility testing.

3. Premature menopause is associated with the development of high blood pressure: a UK Biobank cohort study.

Authors: Arrarte, Vicente; Bertomeu-Gonzalez, Vicente; Cordero, Alberto; Sanchez-Ferrer, Francisco; Soriano-Maldonado, Cristina; Ruiz-Nodar, Juan M.; Lopez-Ayala, Jose M.; Cazorla, Diego and Quesada, Jose A.

Publication Date: 2026

Journal: Menopause

Abstract: OBJECTIVES: Hormonal fluctuations during menopause may contribute to an increased risk of hypertension. Evidence of a direct association is not well defined. The

objective of this study was to analyze the association between premature (: Hormonal fluctuations during menopause may contribute to an increased risk of hypertension. Evidence of a direct association is not well defined. The objective of this study was to analyze the association between premature (**METHODS:** A prospective observational cohort study was conducted in postmenopausal women in the UK Biobank database. Enrollment was between 2006 and 2010, with follow-up until the end of 2023. The outcome variable was the diagnosis of hypertension during follow-up. Lifestyle behaviors, comorbidities, and laboratory tests were collected. Survival models with Weibull distribution were fitted to the time of onset of hypertension. **RESULTS:** Of a total of 107,836 women with a mean follow-up of 14.5 years, 18,508 cases of hypertension were observed (17.2%). The cumulative incidence increased with earlier menopause onset: 16.6% in normal menopause, 18.8% in early menopause, and 22.6% in premature menopause (χ^2 test, $P < 0.001$). Incidence of hypertension was higher in women with surgical menopause, but there was no association in the multivariate model. The effect of premature menopause was maintained in the multivariate model, with a 12.3% higher risk of developing hypertension. **CONCLUSIONS:** Premature menopause had a significant effect on the development of hypertension during follow-up. Surgical menopause did not have a significant, independent effect.

4. Menopause and hospital admission with major mental health conditions: A population-based study.

Authors: Atchison, Michelle;Loi, Samantha M.;Reutens, Sharon;Wilkes, Fiona A.;Looi, Jeffrey CI and Robson, Stephen J.

Publication Date: Jun 01 ,2026

Journal: Australasian Psychiatry

Abstract: Objective To achieve a better understanding of whether menopause has an observable effect on major mental health conditions in midlife for women, we set out to examine population-level effects. We used national data to determine whether hospital admissions for women with severe mental health conditions were affected at the time of menopause. MethodWe accessed data on hospital separations and admitted days for the financial year 2022-2023, from the Australian Institute of Health and Welfare (AIHW). We descriptively graphed the data by age for people against hospital separations per 1000 population or admitted days per 1000 population. Results Hospital separation rates and admissions for women with major depression and bipolar disorder show peri- and post-menopausal increases, and are relatively higher than for men of the same age, while women with schizophrenia show a peak in the perimenopausal period. Conclusions We have found detectable trends in hospital admissions and admitted days for peri- and post-menopausal women with bipolar disorder and depression that differ in trajectory from men. Further lifespan research is recommended to see if these are longitudinal trends across different age cohorts.

5. Spectrum of Endometrial Hyperplasia and Endometrial Carcinoma in Perimenopausal and Postmenopausal Women: A Clinicopathological Study.

Authors: Baghel P.S.;Verma V. and Chaurasiya, S.

Publication Date: 2026

Journal: International Journal of Clinical Obstetrics and Gynaecology. Part L 10(3), pp. 853–856

Abstract: Background: Endometrial hyperplasia and endometrial carcinoma are common gynecological conditions encountered in perimenopausal and postmenopausal women presenting with abnormal uterine bleeding. These lesions vary from benign proliferative changes to invasive malignancies. Histopathological assessment plays a vital role in distinguishing premalignant lesions from carcinoma and guiding appropriate treatment. Aim(s): To study the clinicopathological spectrum of endometrial hyperplasia and endometrial carcinoma in perimenopausal and postmenopausal women and to correlate histopathological findings with clinical presentation. Material(s) and Method(s): A retrospective observational study was carried out in the Department of Pathology over a period of 18 months. A total of 120 endometrial biopsy and hysterectomy specimens from perimenopausal and postmenopausal women presenting with abnormal uterine bleeding were included. Clinical parameters including age, menopausal status, parity, obesity, diabetes mellitus, and hypertension were recorded. Histopathological examination was performed using hematoxylin and eosin stained sections. Statistical analysis was performed using SPSS version 25.0 and p-value <0.05 was considered statistically significant. Result(s): Among 120 cases, endometrial hyperplasia accounted for 68 cases (56.7%) while endometrial carcinoma was observed in 28 cases (23.3%). The most commonly affected age group was 46-55 years. Abnormal uterine bleeding was the predominant presenting complaint. Hyperplasia without atypia was the most frequent histological pattern. Whereas endometrioid adenocarcinoma was the most common malignant lesion. Malignant lesions were more frequently observed in postmenopausal women. Conclusion(s): Endometrial hyperplasia and carcinoma are significant causes of abnormal uterine bleeding in perimenopausal and postmenopausal women. Histopathological evaluation remains the cornerstone for early diagnosis and timely management. Identification of atypical hyperplasia is important as it may progress to carcinoma if left untreated.

6. Elinzanetant in postmenopausal women with sleep disturbance: results from the randomized, phase II NIRVANA study.

Authors: Baker, Fiona C.; Joffe, Hadine; Soares, Claudio N.; Maki, Pauline M.; Bajbouj, Malek; Nappi, Rossella E.; Zammit, Gary; Caetano, Cecilia; Krahn, Ulrike; Shalhoub, Huda; Kramer, Frank; Radcliffe, Hoi-Shen and Seitz, Christian

Publication Date: 2026

Journal: Sleep

Abstract: **STUDY OBJECTIVES:** Menopausal sleep disturbances can negatively impact quality of life. Elinzanetant, a dual neurokinin (NK)-1/NK-3 receptor antagonist, reduced self-reported sleep disturbance in postmenopausal women with moderate-to-severe vasomotor symptoms (VMS) in Phase III OASIS trials. NIRVANA explored elinzanetant's effect on multimodal measures of objective and subjective sleep disturbance in postmenopausal women. **MATERIALS AND METHODS:** Postmenopausal women (N = 110; 40-65 years) with moderate-to-severe VMS (≥ 20 /week) and sleep disturbance (polysomnography [PSG]

wakefulness after sleep onset [WASO] ≥ 30 min) were randomized 1:1 to receive elinzanetant 120 mg or placebo for 12 weeks. Sleep disturbance was assessed using PSG; daily Sleep Diary; and nightly contactless home-monitoring (Sleepiz One+ subgroup). The effect of elinzanetant versus placebo was analyzed using mixed-model repeated measures. **RESULTS:** Elinzanetant was estimated to reduce PSG WASO at Week 4 versus placebo (least square [LS]-mean difference = -22.50 minutes, 90% CI: -35.47, -9.52). Minimal group differences between treatment arms were estimated at Week 12 for PSG WASO (LS-mean difference = -0.94 minutes, 90% CI: -13.96, 12.09). When including all available PSG data across the 12-week period, post hoc random coefficient modeling indicated treatment effects favoring elinzanetant for WASO, total sleep time, sleep efficiency, latency to persistent sleep, number of awakenings, arousal index, and % Stage N2 sleep. Treatment effects on WASO and awakenings favoring elinzanetant were observed with Sleepiz One+ and Sleep Diary across 12 weeks. **CONCLUSION:** In this sleep-focused study, elinzanetant reduced WASO at Week 4 and led to estimated improvements in sleep continuity over 12 weeks, supported by multimodal subjective and objective sleep outcomes. **CLINICAL TRIAL:** A Study to Learn About How Elinzanetant Works and How Safe it is in Women Having Sleep Disturbances Associated With Menopause (NIRVANA), <https://clinicaltrials.gov/study/NCT06112756>, NCT06112756, date of registration 2023-11-01.

7. Dietary supplements for menopausal symptoms and health: a bibliometric analysis of US research (2000-2024).

Authors: Canino, Maria C.;Cohen, Barbara;Byrd, Corette and Gahche, Jaime J.

Publication Date: 2026

Journal: Menopause

Abstract: **OBJECTIVE:** To visualize the research landscape and evolution of dietary supplements investigated for menopausal symptom management and associated health outcomes. **METHODS:** A Web of Science search yielded 4,434 English-language articles limited to published literature from the years 2000-2024. Inclusion criteria were studies conducted in the United States, or in collaboration with the United States, that were dietary supplement-based interventions. R's Bibliometrix package was used to conduct all bibliometric analyses. **RESULTS:** The final data set included 253 publications and showed a low annual scientific productivity growth rate (3.89%), with most articles focused on postmenopause (n = 234). Over 80 unique ingredients were assessed, with calcium, vitamin D, and isoflavones as the most studied. Limited collaboration was observed among the most productive authors, indicated by the limited number of connections between research groups. Cardiovascular-related outcomes and bone health were prominent research themes. Author keywords co-word analysis identified 14 thematic clusters that encompass multiple disciplines. Recent important topics included nitric oxide, aging, and inflammation, whereas emerging themes were related to (1) vitamin D and musculoskeletal health, and (2) calcium, blood pressure, and weight loss. **CONCLUSION:** Dietary supplement research during the menopause transition has remained limited over the last two decades, with perimenopause notably underrepresented. The large number of distinct ingredients, coupled with limited collaborations among researchers, suggests dispersed research efforts and few replication studies. The imbalance

between the number of ingredients studied and supporting studies may hinder the development of evidence-based guidance, but also presents an opportunity to harmonize research efforts and produce stronger science.

8. Psychological symptoms during perimenopause: a global perspective.

Authors: Cunningham, Adam C.;Hedges, Mary S.;Hewings-Martin, Yella;Castaneda, Regina;Karam, Jana;Zhaunova, Liudmila;Faubion, Stephanie S. and Shufelt, Chrisandra L.

Publication Date: 2026

Journal: Menopause

Abstract: OBJECTIVES: Psychological health changes are known to occur during perimenopause, but the extent to which these differ from premenopause remains unclear. This study aimed to assess psychological symptoms during perimenopause compared with premenopause and evaluate differences by country. **METHODS:** Flo app users aged 35 years or above not taking hormonal contraception or hormone therapy were included. The psychological domain of the Menopause Rating Scale (range 0-16) and symptoms within this domain of depressive mood, irritability, anxiety, and exhaustion (range 0-4 each) were evaluated. Participants in perimenopause were compared with those in premenopause (self-reported not in perimenopause or postmenopause). **RESULTS:** A total of 7,975 women were included, with 2,353 in perimenopause (mean age 45 years [SD±4.5]) and 5,622 in premenopause (39 y [SD±4.0]). Psychological Menopause Rating Scale scores in the perimenopause group were significantly higher (7.3 [SD±3.56]) than in the premenopause group (4.8 [SD±3.56]; $P<0.001$). The individual symptoms of depressive mood, irritability, anxiety, and exhaustion were also higher in the perimenopause group ($P<0.001$, for all respectively), with the largest difference being exhaustion. These findings remained after adjusting for known confounders, including an existing diagnosis of anxiety or depression. Geographic analysis included 20 countries across 6 continents, with significant differences identified between countries for the overall psychological symptom domain score and all individual symptoms. **CONCLUSION:** Significantly greater psychological symptom burden was identified in the perimenopause group compared with the premenopause group, with the greatest difference noted for the individual symptom of exhaustion. Differences in symptom burden were also identified by country.

9. Fractional CO₂ laser monotherapy versus combination therapy with vaginal oestrogen for genitourinary syndrome of menopause: A prospective observational cohort study conducted over two years.

Authors: Da Silva A.S. and Taylor, A. A.

Publication Date: 2026

Journal: Maturitas 210. Article Number: 108966.

Abstract: Objective: To prospectively evaluate symptom outcomes following micro-ablative fractional carbon dioxide laser therapy for genitourinary syndrome of menopause, and to

explore whether concomitant use of topical vaginal oestrogen is associated with additional improvement. Design(s): Postmenopausal women presenting with symptoms consistent with genitourinary syndrome of menopause were enrolled in a prospective observational cohort study undertaken in routine clinical practice over a two-year period. Participants received fractional carbon dioxide laser therapy either alone or alongside topical vaginal oestrogen. Symptom severity was recorded at baseline and reassessed four weeks after completion of the treatment course using a ten-point visual analogue scale across six symptom domains. Result(s): Seventy-two participants were included (mean age 61 years). Significant improvements were observed across all symptom domains following laser therapy. Painful sexual intercourse demonstrated the greatest reduction, with scores improving from 5.67 to 2.33 ($p < 0.001$). Vaginal dryness, burning, itching, pain, and dysuria also improved significantly ($p < 0.001$). Participants using concomitant topical vaginal oestrogen showed slightly greater improvements in dryness and dyspareunia, although these differences were not statistically significant. Conclusion(s): Fractional carbon dioxide laser therapy was associated with significant symptom improvement at short-term follow-up after treatment completion in this clinical cohort. No statistically significant additional benefit was observed with concomitant topical vaginal oestrogen, although confounding by indication cannot be excluded and the study had limited power. Larger randomised sham-controlled trials with longer follow-up are required to determine comparative efficacy and durability of response.

10. Laser, radiofrequency, and promestriene in the treatment of genitourinary syndrome of menopause in breast cancer survivors: randomized clinical trial.

Authors: Dedonatto, Chayane; Bianchi-Ferraro, Ana Maria Homem de Mello; Dardes, Rita de Cassia de Maio; Sartori, Marair Gracio Ferreira and Patriarca, Marisa Teresinha

Publication Date: 2026

Journal: International Urogynecology Journal

Abstract: INTRODUCTION AND HYPOTHESIS: Genitourinary syndrome of menopause is a chronic and high prevalent condition with a substantial negative impact in women's quality of life and vaginal health. The prevalence of GSM is even higher among breast cancer survivors receiving endocrine adjuvant therapy. This study aimed to evaluate the efficacy and safety of CO₂ laser (CO₂L), radiofrequency (RF), and promestriene in treating genitourinary syndrome of menopause (GSM) in this population. **METHODS:** A multi-arm randomized clinical trial enrolled postmenopausal women with breast cancer undergoing endocrine adjuvant therapy. Participants were randomized to receive CO₂L, RF, or promestriene treatment. The study assessed before, 4, and 10 months after treatment GSM symptoms, Vaginal Health Index (VHI), sexual function, and urinary symptoms using validated tools. Statistical analysis was performed to compare treatment outcomes and adverse events. The intensity and frequency of GSM signs and symptoms before and after the proposed therapies were evaluated, along with their impact on health-related quality of life, patient satisfaction, and the presence of adverse events related to the treatments, during the 10 months follow-up. **RESULTS:** Fifty-eight women completed the treatment and the 10-month follow-up (21 CO₂L, 19 RF, 18 promestriene). The groups were similar regarding the intensity of vaginal health symptoms and demographic parameters. All treatment groups showed significant improvement in GSM symptoms, VHI, and sexual function. Urinary symptoms were reduced in the CO₂L and RF

groups, with sustained improvement at the 10-month follow-up. Adverse events were mild and well tolerated, with no serious complications reported. **CONCLUSIONS:** CO₂L, RF, and promestriene demonstrated efficacy in improving GSM symptoms, VHI, and sexual function in breast cancer survivors receiving adjuvant endocrine therapy. These treatments offer safe and effective alternatives for managing GSM in this population, with potential benefits for health-related quality of life and treatment adherence.

11. Menopause and Endometriosis - Symptoms and Risk of Malignant Transformation: A Systematic Review of the Literature

Authors: Fitas, Lara Sacramento;Pinto, Pedro Viana and Bernardes, Joao

Publication Date: Jul 21 ,2026

Journal: Journal of Obstetrics & Gynaecology Canada: JOGC 103468

Abstract: **OBJECTIVE:** To review the evidence concerning the clinical presentation of endometriosis in postmenopausal women and the associated risk of malignant transformation. **DATA SOURCES:** This systematic review was conducted following the PRISMA 2020 guidelines and prospectively registered with PROSPERO (CRD420251025035). The study research was conducted across three databases: MEDLINE/PubMed, Scopus, and the Cochrane Library. Only studies published in English were considered, and publications prior to 2000 were excluded from the review. **STUDY SELECTION:** Two authors independently screened all records. Studies were selected if they included postmenopausal women with endometriosis and reported data on clinical symptoms or malignant transformation of endometriotic lesions. We included 32 articles, comprising case-control studies, cohort studies, case series, and cross-sectional studies, encompassing 30 895 women with histologically confirmed endometriosis. **DATA EXTRACTION AND SYNTHESIS:** Six studies provided information on the clinical manifestations, with 55.7% of women experiencing no symptoms. Among symptomatic women, pelvic or abdominal pain was the most common. Malignant transformation of endometrioma into ovarian cancer was reported in 29 articles, with 821 ovarian cancer cases identified. Ovarian clear cell carcinoma (OCCC) and ovarian endometrioid carcinoma (OEC) were the most common histological subtypes related to endometriosis. Risk of bias was assessed using the Newcastle-Ottawa Scale (NOS) and the Joanna Briggs Institute (JBI) Critical Appraisal Tools. **CONCLUSIONS:** Most postmenopausal women with endometriosis are asymptomatic; however, a small subset may have ectopic implants that remain biologically active and progress to malignant precursor forms. Postmenopausal endometriosis appears to confer an increased risk of ovarian carcinoma, particularly OCCC and OEC. Therefore, clinicians should consider this diagnosis and ensure an appropriate assessment for malignancy.

12. Psychological treatments for sexual concerns in perimenopausal and postmenopausal women: a systematic review and meta-analysis.

Authors: Green S.M.;Furtado M.;Peak J. and Babiy, Z.

Publication Date: 2026

Abstract: Importance: - Sexual concerns are commonly reported by perimenopausal and postmenopausal women. Nonpharmacological treatments, including psychological-based treatments, may serve as an alternative and/or complementary option for those who cannot, or choose not, to take medication or who continue to experience symptoms despite their use. Objective(s): - This systematic review and meta-analysis examined psychological interventions that directly targeted and/or assessed sexual functioning in perimenopausal and postmenopausal women using standardized measures. Evidence review: - Web of Science, MEDLINE, and PubMed were searched for studies that evaluated the effects of psychological interventions for sexual concerns during perimenopause and postmenopause. Risk of bias assessments were done using the Cochrane Risk-of-Bias Tool and the Newcastle-Ottawa Scale. Data were pooled in a primary meta-analysis using the Female Sexual Function Index (FSFI), as well as subgroup analyses based on psychological intervention type, with effects reported separately for each subgroup.

Finding(s): - Sixteen articles (n=1, 445) met the eligibility criteria and were included in the systematic review and meta-analysis. Overall, nine randomized controlled trials (n=738) containing FSFI data were pooled in a meta-analysis showing psychological interventions were associated with significant improvements in sexual concerns (standardized mean difference [SMD]=1.37, 95% CI=1.17-1.58, $P^2=0\%$) and mindfulness-based interventions (SMD =0.02, 95% CI=-0.40 to 0.45; n=86; $I^2=0\%$) had no to small effect on the sexual function in perimenopausal and postmenopausal women, while education programs (SMD=2.53, 95% CI=-2.19 to 2.86; $P=0\%$) had no to small effect on the sexual function in perimenopausal and postmenopausal women, while education programs (SMD=2.53, 95% CI=-2.19 to 2.86; $P^2=94\%$) and counseling (SMD=2.43, 95% CI=1.92-2.94; $P=94\%$) and counseling (SMD=2.43, 95% CI=1.92-2.94; $P^2=0\%$) had a large effect. Only one motivational interviewing study (effect size of 0.72) was included, but it revealed a large effect on sexual functioning. Overall risk of bias ranged from low to some concerns, with one study scoring high. Conclusions and relevance: - This systematic review and meta-analysis suggests that psychological interventions are an effective nonpharmacological treatment option for addressing sexual concerns in perimenopausal and postmenopausal women. Although cognitive-behavioral therapy and mindfulness-based approaches showed small to no effects on sexual concerns, these findings should be interpreted with caution, as the included studies did not directly target sexual concerns but instead assessed them as secondary outcomes. Psychological interventions should be considered when discussing treatment options for sexual concerns in perimenopausal and postmenopausal women.

13. The integration of migraine and sleep disturbance in perimenopause: a narrative review.

Authors: Heale, Roberta and Tait, Christie

Publication Date: 2026

Journal: Menopause

Abstract: IMPORTANCE AND OBJECTIVE: This narrative review examines the intersection of migraine and sleep disturbances during perimenopause. Although hormone fluctuations

exacerbate both conditions, clinical guidelines for their coordinated management are lacking. This review explores the impact of perimenopause on these comorbidities, evaluates how treatments for one affect the other, and provides evidence-based recommendations for integrated care. **METHODS:** A search for full-text studies and clinical guidelines written in English was undertaken. The search included PubMed, CINAHL (EBSCOhost), Google Scholar, and ProQuest Nursing and Allied Health from 2015 to 2025. Manual extraction of research articles from review articles and foundational physiology was also undertaken expanding the years from 2003. **DISCUSSION AND CONCLUSION:** An integrated approach to assessment and monitoring of migraine and sleep disorders during perimenopause, and treatment considerations impacting both conditions can reduce the burden of migraine and improve sleep. Coordination of treatment across both has the potential to improve quality of life of women in perimenopause. Further research is needed to better understand coordinated approaches to this complex interplay.

14. Women's Treatment Preferences for Moderate to Severe Vasomotor Symptoms Associated with Menopause: Insights from the WARMER Study.

Authors: Heidenreich, Sebastian; Simoncini, Tommaso; Cutts, Katelyn; Krucien, Nicolas; Kim, Janet; Todorova, Lora; Walker, Janet; Kristjansson, Clarissa and Hillard, Tim

Publication Date: 2026

Journal: The Patient: Patient-Centered Outcomes Research

Abstract: BACKGROUND AND OBJECTIVE: Vasomotor symptoms (VMS) affect up to 80% of women over the course of their menopause and can impair functioning as well as quality of life. Hormone therapy (HT) is the standard of care, but concerns about long-term safety may be a barrier to uptake. Emerging non-hormonal therapies could be an alternative for some women. This study elicited benefit-risk trade-offs that post-menopausal women were willing to make to treat their VMS, with a focus on long-term safety. **METHODS:** A discrete choice experiment (DCE) was developed and tested using iterative interviews (N = 45) with women from Australia, Canada, Denmark, France, Germany, Spain, Sweden, and the UK as well as input from a steering committee. In total, 1465 women were included in the final analysis. Women made a series of choices between two hypothetical treatments and an opt out differing in moderate to severe VMS frequency, other menopause symptom improvement, time to symptom improvement, and 5-year risks of breast cancer, blood clots and osteoporosis. Data were analysed using a finite mixture of random parameter logit models to account for complex levels of preference heterogeneity. Relative attribute importance (RAI) and maximum acceptable risk were derived from the model estimates as the main behavioural outputs. **RESULTS:** In total, 1465 women completed the final DCE survey. The most influential attribute was the 5-year blood clot risk (RAI 26.4-28.4%). Relief of other menopause symptoms and other VMS symptoms were also important attributes. Assuming 5-9 years' use of HT with an associated relative risk of 1.97, breast cancer risk was the fourth most important attribute. Women were willing to accept an extra 0.5% blood clot risk or an extra 0.25% breast cancer risk for every 10% reduction in VMS frequency. Preferences were heterogeneous, with a model mixing three continuous parameters offering the best compromise between parsimony and data fit. **CONCLUSIONS:** Women valued safe efficacious VMS treatment, with high importance on avoiding long-term risks. Reducing VMS frequency mattered over and above

wider menopause symptoms; however, treatment priorities were highly individual.

15. Sleep disturbances during perimenopause and later-life cognitive function.

Authors: Hu, Bangyan;Lin, Joyce Jy;Qiu, Xinye;McAlaine, Kaleigh;Mahalingaiah, Shruthi and Weisskopf, Marc

Publication Date: 2026

Journal: Menopause

Abstract: **OBJECTIVE:** To evaluate whether self-reported sleep disturbances during perimenopause are associated with cognitive function decades later in postmenopausal women. **METHODS:** We analyzed 2,097 postmenopausal women without known dementia in the StLouis Baby Tooth-Later Life Health Study (2019-2023). At one postmenopausal visit, participants retrospectively reported perimenopausal sleep, rated current sleep, and completed a cognitive battery. Sleep disturbances were assessed with the Neuro-QoL Sleep Disturbance scale and classified as none to slight, mild, or moderate to severe. Cognitive function was summarized as a composite Z-score from the TestMyBrain battery. Multiple linear regression estimated adjusted differences (SD units) in cognition across sleep disturbance categories, stratified by frequency of being woken by menopausal symptoms (ie, "never or rarely" vs. "sometimes to always"). **RESULTS:** Perimenopausal sleep disturbances were associated with lower cognitive scores compared with none to slight (mild: -0.07; 95%CI, -0.17 to 0.02; moderate to severe: -0.15; 95%CI, -0.29 to -0.02). No association was observed among women never or rarely woken by menopausal symptoms, whereas larger deficits were seen among those woken sometimes to always (mild: -0.17; 95%CI, -0.28 to -0.06; moderate to severe: -0.31; 95%CI, -0.47 to -0.16). Findings were unchanged after adjustment for hormone therapy or for concurrent sleep disturbances measured at the time of cognitive testing. **CONCLUSIONS:** Perimenopausal sleep disturbances were linked to poorer cognitive function decades later, particularly in women frequently woken by menopausal symptoms. These results suggest that sleep and menopausal symptoms in midlife may be relevant markers of later-life cognitive health, and warrant confirmation in prospective studies.

16. Myalgic encephalomyelitis/chronic fatigue syndrome and menopause: a scoping review.

Authors: Humphreys G.;Berry E.;Hayes L.D.;Jensen S.;Moodley R.;Gillman J.C. and SanalHayes, N. E. M.

Publication Date: 2026

Journal: Fatigue: Biomedicine, Health and Behavior 14(3), pp. 286–294

Abstract: Background: Female sex and menopausal onset have been suggested as risk factors for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS), highlighting the potential relevance of later hormonal transitions, such as menopause. However, the relationship between menopause and ME/CFS symptoms remains poorly understood. Objective(s): This scoping review aimed to provide an overview of existing literature examining

the relationship between ME/CFS and menopause. Data sources: Five databases (CINAHL ultimate, MEDLINE, ScienceDirect, Scopus, CENTRAL) were searched for studies including menopause and ME/CFS. Study selection: Searches yielded 559 articles. Three articles were eligible for the current review, all of which were observational studies. Study appraisal and methods: Data extracted from studies included author(s), publication year, study aims and design, participant information, methodology, outcome measure, and results, with information synthesised narratively. Result(s): Differences in menopausal status in CFS versus non-CFS groups were inconsistent. However, a pattern emerged for other gynaecological symptoms, with excessive pain and bleeding, endometriosis diagnosis and related surgeries more prevalent in CFS groups. While no statistical analysis was performed, participants self-reported worsening ME/CFS symptoms from menopause. Conclusion(s): Although ME/CFS appears to increase menopause-related symptoms and compromises quality of life, the low number of studies limit conclusions.

17. Reduced Breast Cancer Risk in Women With A History of Pre-Eclampsia: Implications of Postmenopausal Hormone Therapy.

Authors: Joensuu, Johanna M.;Ylikorkala, Olavi;Siitonen, Heli;Savolainen-Peltonen, Hanna and Mikkola, Tomi S.

Publication Date: 2026

Journal: Journal of Clinical Endocrinology & Metabolism

Abstract: **CONTEXT:** Both prior pre-eclamptic pregnancy and menopausal hormone therapy (MHT) are determinants for breast cancer (BC). **OBJECTIVE:** To study the effects of prior pre-eclampsia and MHT use on BC risk. **DESIGN:** Register-based cohort study with follow-up for BC (Finnish Cancer Register 1987-2023) and MHT use (National Reimbursement Register 1994-2019). **SETTING:** Nationwide population-based study in Finland. **PARTICIPANTS:** Women with prior pre-eclampsia (n = 31 688) and age-matched control women without pre-eclampsia (n = 91 726) who had given birth in 1969-1993. **INTERVENTION:** The BC risks were compared between prior pre-eclamptic and control women and between prior pre-eclamptic MHT users and non-users. **RESULTS:** Breast cancer occurred less frequently (p = 0.02) in prior pre-eclamptic women (6.6%, n = 2095) than in the controls (7.0%, n = 6410). The age-adjusted BC risk in prior pre-eclamptic women (aHR=0.89, 95% CI 0.83-0.94) was reduced. No clinical characteristics from pre-eclamptic pregnancy (e.g. severity) predicted the magnitude of the BC risk reduction. MHT use was accompanied with comparable BC risk rise in prior pre-eclamptic and control women (1.25, 1.12-1.40 vs. 1.30, 1.18-1.42). The increased risk with any MHT use was seen in both cohorts already after 5 years. This was primarily associated to estrogen-progestogen use, whereas estrogen only was not associated with BC risk in prior pre-eclamptic women. **CONCLUSIONS:** BC risk is reduced in women with a history of pre-eclampsia. The MHT-associated increase in BC risk is similar among women with or without a history of pre-eclampsia. Thus, pre-eclampsia is no contraindication for the use of MHT.

18. Visually Directed Hysteroscopic Biopsy in the Evaluation of Abnormal Uterine Bleeding and Postmenopausal Bleeding: A Joint Society Practice Guideline.

Authors: Joint Society Practice Guideline from AAGL-ESGE-GCH

Publication Date: 2026

Journal: Journal of Minimally Invasive Gynecology

Abstract: **OBJECTIVE:** To provide evidence-based recommendations for the histopathologic evaluation of patients with abnormal uterine bleeding (AUB) and postmenopausal bleeding (PMB). **TARGET POPULATION:** Individuals presenting with AUB and PMB undergoing histopathologic evaluation for suspected intrauterine pathology, including endometrial polyps, submucosal myomas, endometritis, endometrial hyperplasia, atypical endometrial hyperplasia, endometrial intraepithelial neoplasia, and malignancy. **METHODS:** The AAGL, European Society for Gynaecological Endoscopy, and Global Community on Hysteroscopy convened to develop a joint society guideline that systematically reviewed the available evidence using the PICO (Patient, Intervention, Comparison, Outcome) framework. The intervention of interest was diagnostic hysteroscopy performed in outpatient or inpatient settings, including hysteroscopy alone, hysteroscopy combined with ultrasound, or hysteroscopy with biopsy. These approaches were compared with blind endometrial sampling performed without preceding hysteroscopy. The primary outcome was diagnostic accuracy, measured by sensitivity and specificity, using histopathology from endometrial sampling or hysterectomy specimens as the reference standard. Study quality and risk of bias were assessed using established methodological frameworks. **RESULTS:** Meta-analyses results showed that hysteroscopy, with or without concomitant endometrial sampling, provided higher diagnostic accuracy than blind endometrial biopsy for detecting and excluding endometrial cancer, endometrial intraepithelial neoplasia, endometrial hyperplasia with or without cytological atypia, endometrial polyps and submucous myomas. Accuracy estimates were generally higher for detecting than excluding intrauterine pathology. Only 1 study compared hysteroscopy versus blind endometrial biopsy for endometritis, and no comparative data were available for other intrauterine conditions, including uterine niches or retained pregnancy tissue. **RECOMMENDATIONS:** The available evidence supports hysteroscopy as a valuable diagnostic modality in the evaluation of AUB and PMB, particularly when imaging or endometrial sampling is inconclusive and when focal intrauterine pathology is suspected. Hysteroscopy demonstrates high diagnostic accuracy for pre-malignant and malignant endometrial disease, endometrial polyps and submucosal fibroids, and moderate accuracy for excluding these uterine pathologies. When endometrial tissue assessment is indicated in patients with AUB or PMB, sampling should be performed in conjunction with hysteroscopic evaluation, with visually directed biopsy favored over blind sampling. Hysteroscopy should therefore be incorporated into diagnostic algorithms for AUB or PMB.

19. Effectiveness of physiotherapy alone or combined with medical treatment compared to medical treatment only in the management of genitourinary syndrome of menopause in women with urinary incontinence and/or sexual dysfunction: a systematic review.

Authors: Kauffmann S.;Farres M.G.;Naranjo Ortiz C.;BlancoRatto L. and RamirezGarcia, I.

Publication Date: 2026

Journal: Physical Therapy Reviews (pagination), pp. Date of Publication: 2026

Abstract: Introduction: Genitourinary Syndrome of Menopause (GSM) is prevalent among peri- and postmenopausal women and is associated with urinary symptoms, sexual dysfunction, and reduced quality of life. Although medical treatments are widely used, the contribution of physiotherapy, alone or combined with medical therapies, remains insufficiently defined. Method(s): A systematic review was conducted in accordance with PRISMA 2020 guidelines. PubMed, Scopus, and Web of Science were searched from January 2015 to April 2025. Studies evaluating physiotherapy-based interventions, either alone or combined with medical treatments, in women with GSM were included. Outcomes assessed urinary symptoms, pelvic floor muscle function, sexual function, vaginal health, and quality of life. Methodological quality was assessed using the PEDro scale. Result(s): Eleven studies were included. Interventions comprised pelvic floor muscle training, biofeedback, radiofrequency, Pilates-based exercise, and visceral manipulation. Most studies reported improvements in urinary symptoms and pelvic floor muscle function, while effects on sexual and vaginal outcomes were inconsistent. Some studies suggested additional benefits with combined interventions, although protocols and outcome measures varied considerably. Conclusion(s): Physiotherapy-based interventions may improve urinary and selected sexual health outcomes in women with GSM and may complement medical treatments. However, heterogeneity across studies limits comparability. Further high-quality randomized trials with standardized outcomes are required.

20. Menopause experience among people with criminal legal system involvement.

Authors: Leone, Anna M.;Emerson, Amanda;Brotkin, Elana J.;Patel, Shivani;Li, Xinyang;Geller, Elizabeth J.;Lorvick, Jennifer;Ramaswamy, Megha and Knittel, Andrea K.

Publication Date: 2026

Journal: Menopause

Abstract: **OBJECTIVE:** We aim to describe menopause symptom burden during and after incarceration for the growing population of women with a history of criminal legal system (CLS) involvement. **METHODS:** We used Menopause Rating Scale symptom data from the final year of a multiwave cohort of adult women with a history of CLS involvement in three US cities. We also used qualitative semistructured interview data about menopause treatment in the community from adult women from five US states who experienced menopause during their CLS involvement. Descriptive statistics and qualitative thematic analysis were used to triangulate findings. **RESULTS:** Of 507 women, 348 (68.8%) reported menstrual cycle data. The mean age was 46. Women were either premenopausal (n=151), early perimenopausal (n=25), late perimenopausal (n=10), or postmenopausal (n=162). Symptoms were common and differed by group. The most severe symptoms in premenopause, early perimenopause, late perimenopause, and postmenopause were joint pain (2.27, SD 1.12), sleep problems (2.44, SD 1.13), joint pain (2.80, SD 0.45), and hot flashes (2.42, SD 1.07), respectively. The qualitative analysis included 29 semistructured interviews focused on access to menopause treatment in the community during or after CLS involvement. Primary themes were logistical

barriers (lack of provider, insurance/financial, transportation) and quality of care barriers (poor provider communication skills, lack of provider knowledge). **CONCLUSION:** Women with a history of CLS involvement commonly experience menopausal symptoms, some of which are severe. These symptoms are experienced in the context of CLS involvement that may amplify barriers to accessing care.

21. Menopausal hormone therapy and incident benign paroxysmal positional vertigo in postmenopausal women: A prospective cohort study using UK Biobank data.

Authors: Li, Li;Chen, Jingyun;Han, Xu;Xiao, Dong;Li, Junxin;Cui, Xiangyan;Yu, Hong and Wang, Xin

Publication Date: Jul 26 ,2026

Journal: Maturitas 212, pp. 109076

Abstract: OBJECTIVES: Menopausal hormone therapy and benign paroxysmal positional vertigo, a disorder linked to postmenopausal estrogen deficiency, have not been examined together in a large cohort. We assessed whether hormone therapy is associated with incident positional vertigo and its persistence after cessation. **STUDY DESIGN:** We constructed a prospective cohort of 160,617 postmenopausal women from the UK Biobank, excluding prevalent cases, and ascertained hormone therapy status, duration, and time since cessation from self-report. Incident cases were modelled with cause-specific Cox regression on the attained-age scale, adjusting for sociodemographic, lifestyle, cardiometabolic, and comorbidity covariates. **MAIN OUTCOME MEASURES:** Incident benign paroxysmal positional vertigo, from the first hospital (ICD-10 H81.1) or primary-care record. **RESULTS:** In 157,245 women with complete covariate data (2627 events), the fully adjusted hazard ratio was 1.22 (95% confidence interval 1.09 to 1.38) for current use and 1.28 (1.17 to 1.39) for past use versus never use, stable across adjustment. Risk rose with duration (1.50 at 10 or more years; p for trend <0.001) and persisted after cessation (1.39 at 10 or more years since stopping). The duration–response relationship was stronger for recurrent than single-episode disease (hazard ratio at ten or more years, 1.83 versus 1.41). The association varied with attained age. Exploratory formulation and bone-mineral analyses were inconclusive. **CONCLUSIONS:** Menopausal hormone therapy use was positively associated with incident positional vertigo, with a duration-response relationship and persistence after cessation. These pooled estimates are attained-age-averaged and hypothesis-generating; they warrant prospective validation and do not justify changing an individual woman's menopausal hormone therapy regimen.

22. Efficacy and Safety of Radiofrequency as a Treatment Modality for Genitourinary Syndrome of Menopause: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

Authors: Lumowa, Fransisko Saverio Reinard;Kurniawati, Eighty Mardiyana and Hardianto, Gatut

Publication Date: 2026

Journal: International Urogynecology Journal

Abstract: INTRODUCTION AND HYPOTHESIS: Existing treatment approaches to genitourinary syndrome of menopause (GSM) have constrained patient adherence. Radiofrequency (RF) therapy may address this issue. In this study we seek to assess the efficacy and safety of RF therapy in comparison with other interventions for the management of GSM. **METHODS:** We performed pertinent literature searches in the Cochrane Library, Medline, Scopus, and ClinicalTrials.gov databases utilizing specific keywords. Continuous variables were aggregated into the mean difference (MD), whereas dichotomous variables were aggregated into odds ratios (OR) with 95% confidence intervals (95% CI) utilizing random-effects models. **RESULTS:** A total of eight randomized clinical trials (RCTs) were included. Our pooled analysis demonstrated a more significant enhancement in the total Female Sexual Function Index (FSFI) score among patients with GSM undergoing RF therapy in comparison with those receiving vaginal estrogen (MD -5.57; 95% CI 2.42, 8.72; $p = 0.0005$) and placebo/moisturizer (MD 4.57; 95% CI 1.02, 8.12; $p = 0.01$). Nonetheless, RF therapy exhibited no substantial disparity in the total FSFI score whenever compared with laser therapy (MD 0.45; 95% CI -3.28, 4.17; $p = 0.81$). In terms of the Vaginal Health Index, RF therapy showed no significant difference compared with vaginal estrogen ($p = 0.50$), laser therapy ($p = 0.97$), and even with placebo/moisturizer ($p = 0.14$). The reported adverse events (AEs) were solely mild, with no serious AEs noted. **CONCLUSIONS:** Radiofrequency therapy was associated with significantly greater improvement in sexual function than vaginal estrogen and placebo/moisturizer, but comparable with laser therapy. Vaginal health outcomes were similar across all comparators. Adverse events were exclusively mild, supporting an acceptable safety profile.

23. A self-care smartphone application for midlife women with menopausal symptoms: A proof-of-concept study.

Authors: Ohsuga T.;Egawa M.;Tsuyuki K.;Ohtsuki M.;Wanjie Y.;Juan S.;Hinotani R.;Takahashi Y.;Nakayama T. and Mandai, M.

Publication Date: 2026

Journal: Digital Health 12

Abstract: Objectives: A self-care smartphone application, JoyHer Pro, was developed to support midlife women experiencing menopausal symptoms by providing daily symptom tracking, personalized healthcare plan recommendations, and educational content. A proof-of-concept study was conducted to explore its feasibility and preliminary impact. Method(s): This single-arm pre-post study simulated a health checkup-based model of digital intervention. Ninety-one Japanese women aged 45-55 years with moderate menopausal symptoms used JoyHer Pro for six months. The primary outcome was the change in total scores on the scaled Questionnaire for the Assessment of Climacteric Symptoms in Japanese Women (sQACS) from baseline to six months. Result(s): The six-month follow-up rate was 96%. Participants recorded symptoms on a median of 165 days (90% of the study period) and logged self-care activities on 59% of days. They accessed a median of 42 educational topics (72% of available content). The total sQACS score significantly decreased from baseline to three and six months (both $p < 0.001$). Participants also reported improvements in their perception and attitude toward menopause, as well as greater self-assessed knowledge and coping ability. Some participants newly sought or planned medical consultation following app use.

Conclusion(s): This proof-of-concept study suggests that JoyHer Pro is a feasible digital self-care support tool for midlife women with menopausal symptoms and may provide a basis for future research on integrating digital interventions into preventive care and public health strategies.

24. Impact of menopause on dry eye disease: a cross-sectional comparative study.

Authors: Pandey, Harshita and Kumar, Raj

Publication Date: May 11 ,2026

Journal: Post Reproductive Health 1-7

Abstract: BACKGROUND: Post-menopausal women frequently experience ocular dryness, with a notably greater severity of clinical symptoms and signs. Despite the high burden of dry eye disease in this population, limited evidence exists regarding the underlying nature and characteristics of this condition. **METHODS:** In this cross-sectional comparative study, 319 participants were enrolled: 102 post-menopausal women, 105 age-matched men, and 112 younger healthy females. Assessments included the Ocular Surface Disease Index (OSDI), tear breakup time, corneal and conjunctival staining, Schirmer's test, and meibomian gland evaluations. Severity was classified using established clinical criteria. Multivariable logistic regression was performed to identify predictors of severe DED. **RESULTS:** Post-menopausal women exhibited significantly higher mean OSDI scores (24.1 +/- 16.5) compared to age-matched men (20.2 +/- 16.7) and younger females (19.8 +/- 15.3; $p = 0.043$). They also had notably shorter TBUT, greater ocular surface staining, and more pronounced meibomian gland dysfunction. Burning (20.6%) and itching were more frequent in this group ($p = 0.047$). Multivariable regression analysis identified burning symptoms as a significant predictor of severe DED (OR ~ 2.40), while post-menopausal status (OR ~ 1.19) and lid-margin changes (OR ~ 1.42) showed weaker associations. **CONCLUSION:** DED in post-menopausal women is more severe and predominantly exhibits an evaporative profile, characterised by tear film instability and meibomian gland dysfunction.

25. Consistency of efficacy and safety of elinzanetant for vasomotor symptoms and sleep disturbance associated with menopause across different populations: a review of the OASIS clinical trial program

Authors: Pinkerton, JoAnn V.;Simon, James A.;Panay, Nick;Nappi, Rossella E.;Brennan, Donal J.;Donders, Gilbert;Soares, Claudio N.;Maki, Pauline;Caetano, Cecilia;Haberland, Claudia;Laapas, Kaisa;Zuurman, Lineke and Cardoso, Fatima

Publication Date: Jul 25 ,2026

Journal: Maturitas 212, pp. 109075

Abstract: Elinzanetant, a dual neurokinin-1/-3 receptor antagonist, is approved for the treatment of moderate-to-severe vasomotor symptoms. The double-blind, randomized, placebo-controlled Phase III OASIS-1-4 studies evaluated elinzanetant's efficacy and safety in diverse populations of women, including those with vasomotor symptoms associated with

natural or surgical menopause (OASIS-1, -2, and -3) and caused by endocrine therapy for breast cancer (OASIS-4). Results were similar across all trials for the respective primary and key secondary endpoints (included in the statistical testing hierarchy). Significant reductions vs. placebo in the frequency of vasomotor symptoms appeared from as early as week 1 in OASIS-1 and -2 (analyzed descriptively in OASIS-3 and -4), and at week 4 in OASIS-1, -2, and -4 (analyzed descriptively in OASIS-3). By week 12, all studies showed significant reductions vs. placebo, with benefits maintained for up to 50 weeks. In OASIS-1 and -2, the severity of vasomotor symptoms significantly decreased vs. placebo at weeks 4 and 12 (analyzed descriptively in OASIS-3 and -4). Elinzanetant treatment improved sleep disturbance, assessed by the Patient-Reported Outcomes Measurement Information System Sleep Disturbance Short Form 8b total T-score, and menopause-related quality of life, measured as total score on the Menopause-specific Quality of Life questionnaire, across all four trials as early as week 1. Significant reductions vs. placebo were seen at week 12 in OASIS-1, -2, and -4 (key secondary endpoints; analyzed descriptively in OASIS-3 as a secondary endpoint). Elinzanetant was generally well tolerated with consistent efficacy across all OASIS trials in diverse populations of women experiencing vasomotor symptoms.

26. Efficacy of a probiotic formula in the management of menopausal symptoms and quality of life: a randomized controlled trial.

Authors: Rodriguez-Palmero, Maria;Prat, Claudia;Molina, Xavier;Miras, Francesc;Huedo, Pol;Perez, Marta;Espadaler-Mazo, Jordi;Palacios, Santiago and Gonzalez, Silvia P.

Publication Date: 2026

Journal: Menopause

Abstract: OBJECTIVES: Estrogen decline during menopause transition is associated with physical and psychological symptoms that impair overall well-being. In a previous randomized trial, a probiotic formula comprising *Levilactobacillus brevis* KABP052, *Lactiplantibacillus plantarum* KABP051, and *Pediococcus acidilactici* KABP021 was found to be associated with a slower decline in estrogen levels. Therefore, we hypothesized that the intake of 1x10⁹ colony-forming units/day of this formula could improve menopausal symptoms and quality of life. **METHODS:** We conducted a decentralized, randomized, double-blind, placebo-controlled trial using a real-world approach. Women between 45 and 60 years old who were in perimenopause or postmenopause and had Cervantes Quality of Life score ≥ 38 were enrolled and allocated 2:1 to the probiotic (n=160) or placebo group (n=85) for a 3-month period. Menopausal symptoms and quality of life were evaluated by using the Menopause Rating Scale II, Cervantes and Utian Quality of Life questionnaires. **RESULTS:** In the full analysis set, Menopause Rating Scale II total score decreased significantly in the probiotic group compared to placebo across the study (global mean difference between groups: -1.00 [0.47], P=0.033), with an improvement in the somato-vegetative domain (-0.54 [0.20], P=0.007). Per-protocol analysis also revealed differences in the psychological domain between groups, favoring the probiotic (-0.51 [0.25], P=0.040). Cervantes scale showed no significant differences between groups, but the change in Utian Quality of Life score was significantly higher in the probiotic group (2.21 [1.07], P=0.040). **CONCLUSION:** In this real-world study, the probiotic formula was associated with improvements in menopause-associated symptoms and quality of life, whereas the global Cervantes score appeared to be

similar between groups. Future investigations are required to confirm this clinical effect and the underlying mechanisms of action. ClinicalTrials.gov identifier: NCT06604234.

27. Can menopausal status moderate the effects of aerobic exercise on executive functions? evidence from a randomized controlled trial.

Authors: Sanz Simon, Sharon;Gal, Maya;Lee, Seonjoo;Walker, Marcella D.;Schneider Beerli, Michal;Bachmann, Gloria;Lauriola, Vincenzo;Sloan, Richard;Stern, Yaakov and Gazes, Yunglin

Publication Date: Aug 01 ,2026

Journal: Journal of Alzheimer's Disease 13872877261471900

Abstract: Background Physical exercise is widely recognized for its cognitive benefits; however, the effect of menopausal status in modulating the cognitive effects of exercise is not definitively established. Objective To examine the cognitive benefits of two 6-month physical exercise programs in cognitively healthy older women across adulthood, and whether menopause status moderates these benefits. Methods In a post hoc analysis of a randomized controlled trial, 93 cognitively healthy women (aged 20-67; 43% at post-menopause) were assigned to either aerobic exercise (AE) or stretching/toning (ST) 4 days a week for six months. Neuropsychological assessment, cardiorespiratory exercise test, and blood draw were performed at baseline, 3-months, and 6-months. Linear mixed-effects regression models assessed whether menopausal status moderated the impact of exercise on executive functions and processing speed. Results Seventy-six participants (81.7%) completed the intervention. A time-by-group-by-menopause interaction emerged after 3 months ($\beta = -0.89$; $p = 0.001$) and 6 months ($\beta = -0.67$, $p = 0.016$). Post-menopausal women in the AE group showed greater improvement in executive functions compared to the ST group and pre-menopausal women. Models controlled for age, education, and baseline cognitive performance. Conclusions Our results provide novel evidence that AE improves cognition with pronounced executive functions benefits in post-menopausal women, a population at higher risk for dementia. Since women are at a higher risk of developing Alzheimer's disease compared to men, these findings support AE as a relevant strategy to promote women's brain health. Although this is a secondary analysis, it may inform future exercise trials targeting women.

28. The association between age at menopause and circadian syndrome: a study based on the UK Biobank.

Authors: Su T.;Ding L.;Wei Z.;Chen Z.;Liu L.;Li X.;Lian Z.;Aimuzi R. and Li, R.

Publication Date: 2026

Journal: BMC Public Health 26(1) Article Number: 2011.

Abstract: Aim: To investigate the association between age at menopause and prevalent circadian syndrome, a construct integrating metabolic dysfunction with circadian rhythm disruption and depressive symptoms. Method(s): This cross-sectional analysis included

112,918 women with natural menopause from the UK Biobank. Age at menopause was categorized as ≥ 55 years. Circadian syndrome was defined as the presence of at least four of seven components: reduced high-density lipoprotein cholesterol, elevated triglycerides, elevated waist circumference, hyperglycemia, elevated blood pressure, short sleep, and depression. Missing covariate data were handled using multiple imputation by chained equations. Multivariable logistic regression models were used to evaluate the associations of age at menopause with circadian syndrome and its individual components, and restricted cubic spline analyses were performed to assess the dose-response relationship. Result(s): Among 112,918 participants, 19,730 (17.47%) had circadian syndrome. Compared with menopause at 50-54 years, the adjusted odds ratios (ORs) for circadian syndrome were (OR 1.52, 95% CI 1.37-1.68) for menopause before 40 years, (OR 1.24, 95% CI 1.17-1.31) for 40-44 years, (OR 1.06, 95% CI 1.02-1.10) for 45-49 years, and (OR 1.16, 95% CI 1.11-1.21) for ≥ 55 years. Restricted cubic spline analyses showed a significant non-linear association between age at menopause and circadian syndrome (P for overall association < 0.001 ; P for non-linearity < 0.001). In component-specific analyses, premature menopause showed the strongest associations with short sleep (OR 1.55, 95% CI 1.34-1.79), depression (OR 1.41, 95% CI 1.26-1.57), reduced high-density lipoprotein cholesterol (OR 1.39, 95% CI 1.27-1.53), and elevated triglycerides (OR 1.38, 95% CI 1.27-1.50). Subgroup analyses suggested interactions by smoking status and age at menarche. Findings were largely consistent in complete-case and HRT-adjusted sensitivity analyses. Conclusion(s): Age at menopause was non-linearly associated with the odds of prevalent circadian syndrome in this cross-sectional study. The association was strongest for premature menopause, while later menopause was also associated with modestly higher odds. Future prospective studies are needed to clarify the temporal relationships between menopause timing and circadian syndrome, and to determine which components drive the observed associations.

29. The role of IL-26 and IL-38 levels on menopause and vasomotor symptoms: a cross-sectional study.

Authors: Tercan C.;Can S.;Aktoz F.;Vurgun E. and Turgut, A.

Publication Date: 2026

Journal: Ginekologia Polska 97(6), pp. 445–451

Abstract: Objectives: Investigations into interleukins as predictors of vasomotor symptoms in the postmenopausal period have yielded mixed results. There is a growing interest in defining the complete cytokine profile during menopause. This research aims to provide insights into the potential roles of IL-26 and IL-38 in relation to menopausal symptoms and the transition to postmenopausal status. Material(s) and Method(s): A total of 168 patients (56 in premenopausal women, 56 in postmenopausal women without vasomotor symptoms, and 56 in postmenopausal women with vasomotor symptoms) aged between 45 and 55 years were included. Serum levels of IL-26 and IL-38 were measured to assess differences in interleukin levels among the patient groups. Result(s): The analysis revealed no significant differences in IL-26 and IL-38 levels between premenopausal and menopausal patients ($p = 0.09$ and $p = 0.66$, respectively). However, the median menopausal duration among individuals experiencing vasomotor symptoms was 24 months shorter compared to those without symptoms ($p = 0.022$). Although IL-26 levels did not vary significantly between groups, the

group with vasomotor symptoms exhibited higher IL-38 levels compared to those without symptoms ($p = 0.76$ and $p = 0.029$, respectively). Furthermore, after adjusting for other variables, the odds of vasomotor symptom prevalence increased by 1% with every 1 ng/L increase in IL-38 levels and decreased by 1% with every additional month of menopausal time. Conclusion(s): In conclusion, this study shows that higher IL-38 levels were associated with the presence of vasomotor symptoms. These results suggest a potential involvement of IL-38 in the pathophysiology of menopausal symptoms.

30. Premature menopause and risk of kidney stone disease: evidence from the UK biobank and National Health and Nutrition Examination Survey.

Authors: Usman, Muhammad;Deng, Chunnuan;Hu, Jintao;Lai, Cong;Wu, Zhikai;Yuan, Zhihan;Xie, Junyi;Liu, Cheng;Yu, Hao;Li, Kuiqing;He, Kang;Yu, Chuanchuan;Sun, Ge;Su, Rijia;He, Wang;Liang, Weiming;Tang, Zhuang and Xu, Kewei

Publication Date: 2026

Journal: Menopause

Abstract: OBJECTIVE: Kidney stone disease (KSD) is a global health burden. Premature menopause (PM) may increase the likelihood of KSD, but the influence of hormone therapy (HT) and genetic predisposition is unclear. We examined the association between PM and KSD in two large cohorts and evaluated potential modification by HT and polygenic risk scores (PRS). **METHODS:** We conducted cross-sectional analyses in 7,112 women from the National Health and Nutrition Examination Survey and 189,900 women from UK Biobank (UKB), with PM defined as menopause before age 40 years. Logistic regression estimated odds ratios (ORs) for prevalent KSD, and Cox models estimated hazard ratios (HRs) for incident KSD over a mean follow-up of ~15 years in UKB. Sensitivity analyses and PRS stratification were performed to assess robustness and potential effect modification. Statistical analyses were conducted using R software. **RESULTS:** In National Health and Nutrition Examination Survey ($N = 7,112$), KSD prevalence was higher in women with PM compared with women without PM (13.4% vs. 8.4%), with logistic regression showing 50% higher odds (OR: 1.54, 95% CI: 1.11-2.13). In the UKB baseline analysis ($N = 189,900$), PM was associated with higher odds of KSD (OR: 1.55, 95% CI: 1.32-1.83). In the prospective cohort ($N = 188,282$), women with PM had a 29%-55% higher hazard of incident KSD (HR: 1.29-1.55). Cumulative hazard curves showed early divergence ($P < 0.001$). PRS analyses demonstrated increasing hazards of KSD with higher genetic predisposition (HR: 1.22-1.80). HT use partially attenuated, but did not eliminate, the elevated association. **CONCLUSION:** PM was consistently associated with KSD across two large cohorts. This association remained robust across multiple analytical approaches. Genetic predisposition was associated with higher hazards of KSD, whereas HT did not meaningfully modify these associations. These findings suggest a clinically relevant link that warrants further investigation in prospective and mechanistic studies.

31. Continuity of hormone replacement therapy in custody: Why abrupt discontinuation puts women at risk

Authors: Walker, Nichola

Publication Date: Jul 27 ,2026

Journal: Journal of Forensic & Legal Medicine 122, pp. 103223

Abstract: The continuity of essential medications is a fundamental component of clinical governance within custodial healthcare. National standards, including the Royal Pharmaceutical Society (RPS) Professional Guidance on the Safe and Secure Handling of Medicines¹ and the College of Policing's 2024 Authorised Professional Practice (APP) for Custody,² emphasise the importance of maintaining prescribed treatments to prevent avoidable clinical deterioration. Yet hormone replacement therapy (HRT) frequently remains excluded from rapid medicines continuity pathways, resulting in abrupt interruption for women entering police and prison custody despite risks highlighted in the UK National Preventive Mechanism (NPM) Menopause in Detention Toolkit.³ This article examines the immediate physiological and psychological consequences of abrupt iatrogenic oestrogen withdrawal, framing endocrine withdrawal as an acute patient safety issue rather than a lifestyle concern. It integrates emerging evidence, including the UK National Preventive Mechanism (NPM) Menopause in Detention Toolkit,³ the Independent Custody Visiting Association (ICVA) Menopause Impact Report,⁴ and the growing recognition that women and clinicians require clearer evidence to support decisions regarding the continuation or discontinuation of hormone replacement therapy (Hamoda and Panay, 2024).⁵ It also incorporates peer-reviewed neuroendocrine research demonstrating the destabilising effects of abrupt oestradiol withdrawal⁶⁻⁸. The paper argues for a paradigm shift in custodial healthcare, recognising hormone replacement therapy as an essential endocrine treatment requiring timely continuity of care. It proposes practical approaches to medicines verification and rapid bridging protocols to reduce avoidable endocrine withdrawal, support accurate clinical assessment and improve patient safety.

32. The day-to-day bidirectional association of sleep with positive and negative affect in midlife postmenopausal women.

Authors: Wood, Shelby C.;Thurston, Rebecca C.;Chang, Yue-Fang and Maki, Pauline M.

Publication Date: Jul 22 ,2026

Journal: Sleep Medicine 147, pp. 109156

Abstract: BACKGROUND: Poor sleep and affect are common, co-occurring symptoms in postmenopausal women. However, the temporal associations between these symptoms - whether sleep disturbances trigger next day changes in affect and/or whether affect disrupts next night sleep - is unknown. Here we examined the day-to-day bidirectional association of sleep with positive and negative affect in midlife postmenopausal women. **METHODS:** Midlife postmenopausal women (N=240, mean age 59.42+/-4.11 years, 82.08% White) completed 72h of sleep and affect monitoring. Sleep characteristics (wake after sleep onset, sleep efficiency, total sleep time) were assessed via wrist actigraphy. Positive affect (energetic, interested/involved) and negative affect (angry/irritated, nervous/anxious, stressed) were assessed via ecological momentary assessment. Multiple linear regression models were conducted for all analyses. Moderation of the associations between sleep and affect by vasomotor symptoms and depressive symptoms was also examined. **RESULTS:** Better sleep

(i.e., lower wake after sleep onset, higher sleep efficiency, and moderate total sleep time) was associated with higher next day positive affect but not negative affect. Higher positive affect was associated with shorter next night total sleep time. There was little evidence of vasomotor symptoms and depressive symptoms moderating these associations. **CONCLUSION:** Findings support day-to-day associations between sleep and positive affect rather than negative affect. More robust associations were observed in the direction of sleep to next day positive affect compared with the positive affect to next night sleep direction. These findings highlight the potential to enhance positive affect in midlife postmenopausal women through sleep improvement.

33. Association of sleep duration and quality with age at natural menopause: results from NHANES 2005-2018.

Authors: Xie Q.;Zhu Y.;Chen B.;Zhang Y.;Zhao M.;Lan Y.;Quan X. and Yang, X.

Publication Date: 2026

Journal: BMC Women's Health 26(1) Article Number: 309.

Abstract: Background: While sleep is closely related to menopause, existing research has primarily focused on the impact of menopause on sleep, leaving the influence of sleep patterns on the timing of menopause largely unexplored. This study aimed to investigate the associations of sleep duration and quality with age at natural menopause.

Method(s): This study included women with complete data on sleep patterns and natural menopausal age from the National Health and Nutrition Examination Survey (NHANES) cycles 2005-2018. Logistic and linear regression models, progressively adjusted for demographic, lifestyle, and health-related covariates, were used to examine the relationships of sleep duration and quality with menopausal age, analyzed both as categorical (early/late menopause) and continuous variables. Restricted cubic splines were applied to assess nonlinear associations. Subgroup analyses and alternative menopausal age classifications were also performed.

Result(s): A total of 2,157 women were included. Compared with medium sleep duration (7-9 hours), short sleep duration (= 28 and those without hormone use. Interestingly, poor sleep quality was positively associated with late menopause among women with ≥ 3 live births and no history of oral contraceptive use.

Conclusion(s): Short sleep duration and poor sleep quality may be associated with early menopause, with evidence of nonlinear relationships and subgroup heterogeneity. In certain populations, poor sleep quality may also be linked to later menopause. These findings highlight the complex role of sleep in reproductive aging, requiring prospective studies to clarify causal pathways.

In the news

Why heatwaves hit women harder

Author: Emily Atkinson

Date: 9 July 2026

Source: BBC News

“Overwhelmed, irritable, dizzy, bloated, exhausted.

These are the words coming up frequently in comments sent to the BBC by women who, having barely recovered from the record-breaking heat in June, are bracing for more hot weather.

Extreme heat can affect anyone. But heatwaves are a "stress-test" for women's cardiovascular systems, and hit them harder than men, Dr Nighat Arif, an NHS GP who specialises in women's health, told the BBC.”

<https://www.bbc.co.uk/news/articles/c4gyp1knzzxo>

Sources used:

The following were used in the creation of this bulletin: MEDLINE, Emcare, and Google.

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