

[View this email in your browser](#)

International **IMS** Menopause Society

Promoting education and research on midlife women's health



Our Menopause World - February 2023

President's Report

Dear Friends and Colleagues,

It is a great pleasure to communicate with you once again. It has been a busy start to the year for the International Menopause Society.

We held an online webinar on Tuesday 17th January chaired by Professor Wendy Wolfman on the important topic of sleep. There were excellent presentations by Professor Hadine Joffe on the topic of Impact of Menopause on Sleep and by Professor Tommaso Simoncini on the topic of Treatment of Sleep Disorders associated with the Menopause with stimulating interactive discussions after the presentations.

Registration is now open for our next webinar on 14th February 2023, 15:00 CET which is on the

very topical subject of Menopause in the Workplace (see below) and these will continue on a monthly basis with a diverse range of speakers and topics, kindly supported by an unrestricted educational grant from Besins Healthcare who has no influence on the choice of speakers and subject material. We are most grateful to all our speakers and chairs who have selflessly given of their time and efforts over the years since the online educational platform was started.

Title: Menopause and Work

Chair: Professor Peter Chedraui

Speaker: Professor Kathleen Riach

The Impact of menopause and work

Speaker: Dr Marije Geukes

EMAS Recommendations on Menopause in the Workplace

We also held a meeting of the IMS Executive Committee in London on January 18th/19th 2023 in which we spent a considerable amount of time reviewing and reflecting on the roles of the IMS Executive and Board, and the many achievements of the President and Board from 2020-2022. We then used this information for strategic planning of the priorities for the current term of office, 2022-2024, and beyond. This was a highly fruitful exercise which enabled us to optimise various important aspects of the running of IMS including finance, governance, education and communication with both healthcare providers (HCPs) and the public.

The key points that emerged from the two-day meeting was that strategic principles of IMS have been, and will continue to be:

- Good communication and transparency in all aspects of societal governance as outlined by the society's Scheme of Governance, Management and Delegation document;
- Fiscal prudence, which aims to optimise the financial security of the society whilst supporting the academic activity of IMS members and the wider menopause world;
- Ensuring data protection and security, especially cybersecurity – achieved through active risk assessment, protection and response from professional security organisations; and
- Continuing to grow our collaboration with other societies and global organisations.

There was also much discussion about the organisational structure of the IMS going forward, with emphasis on the importance of the many "sub" committees which are an invaluable way of the IMS Executive and Board obtaining new information from our wider membership. New committees in development include Menopause Info, Young Professionals, Council of Affiliated Menopause Societies (CAMS) steering group and IMS Recommendations. We will be reaching out soon to a you, our members, to help populate these committees.

There was also considerable discussion about the plans for the CAMS. Scheduling is already underway for quarterly online CAMS regional meetings and the first issue of our "CAMS Connect" newsletter. Both of these endeavours are designed to improve our communication with our global network of menopause and midlife healthcare providers.

A more detailed report of our strategic activities will be produced in due course which will contribute to the development of a "Manual of Operations" for the society. This will also help us to update and compliment the society's Constitution and Rules.

Menopause continues to be in the news. The UK government recently responded to the Women and Equalities Committee's report on Menopause and the Workplace. There has already been considerable progress in the field of menopause in general; these are some of the initiatives:

- Publication of a Women's Health Strategy with education of HCPs and the public a priority, and appointment of a Women's Health Ambassador, Professor Lesley Regan;

- Establishment of an NHS England National Menopause Care Improvement programme aligned with the NICE guideline on menopause diagnosis and management;
- Provision of HRT pre-payment certificates from April 2023 to reduce the cost of prescriptions, and removal of dual prescription charges for estrogen and progesterone; and
- Ensuring provision of at least one menopause specialist in every healthcare region of the country by 2024.

However, it was not accepted by the government that menopause should be a characteristic protected by law. There is still much work to be done, but I believe that much progress has been made, and some aspects could be adapted in other countries and regions of the world, with appropriate sensitivity to local political, cultural, religious and financial issues.

Regional issues and more will be covered in our symposium at EMAS as mentioned in my previous report. Full details are now available on the EMAS meeting website and shown below <https://emas2023.abstractserver.com/program/#!/details/sessions/3>.

Title: Ethnic and Socio-Cultural Challenges of Global Menopause Care

Chairs: Nick Panay (UK) Santiago Palacios (Spain)

Speakers/Topics

Professor Duru Shah (India)

The Latur Project: Screening for Non-Communicable Diseases in Rural India

Dr Nicole Jaff (South Africa)

Does one size fit all? The usefulness of menopause education across low- and middle-income countries.

Professor Rossella Nappi (Italy)

Talking sex in a diverse world 15 mins

The next IMS Board meeting will take place just before the EMAS meeting on May 2nd, 2023 and will be followed by meetings of the "sub" committees on May 3rd, 2023.

The Scientific Programme and Local Organising Committees continue to plan our next World Congress in Melbourne Oct 19th to 22nd 2024. Can I please ask you all once again to spread the word amongst your colleagues; by now you should have received the promotional slide that you can incorporate in all your academic activities and forward to your academic institutions. Finally, please do contribute to our Endowment for Education and Research (EER). Attendance at our World Congresses would otherwise be impossible for many trainees without travel bursaries from the EER [The IMS Endowment for Education and Research - International Menopause Society \(imsociety.org\)](https://imsociety.org).

As mentioned above, the Executive Committee discussed communication in our January meeting. Our aim is to ensure that the amount of information we send to our members balances being respectful of your very busy schedules and keeping you up to date. Therefore, we have agreed some modifications to the frequency of our member communications. The full and more detailed issue of Our Menopause World, containing the President's Report, will alternate monthly with a streamlined issue that offers you an 'at a glance' update on our latest news and educational initiatives. The excellent critical analyses of recent papers from Menopause Live will be provided on an alternate weekly basis. In the meantime, I look forward to receiving your ongoing suggestions and contributions to improve our society.

Nick Panay

nick.panay@imsociety.org

General Update

The 29th webinar in the IMS webinar series will be held on Tuesday 14th February 15:00 (CET)/14:00 (UK) 'Menopause and Work' will be moderated by Professor Peter Chedraui. Professor Kathleen Riach will be presenting on 'The Impact of Menopause and Work' and Dr Marije Geukes will be presenting on 'EMAS Recommendations on Menopause in the Workplace'. The link for registrations is [Online Events - International Menopause Society \(imsociety.org\)](https://imsociety.org).

The 28th webinar in the IMS webinar series was held on Tuesday 17th January, 'To Sleep, Perchance to Dream' was moderated by Professor Wendy Wolfman. Professor Hadine Joffe presented on 'Impact of Menopause on Sleep' and Professor Tommaso Simoncini presented on 'Treatment of Sleep Disorders Associated with Menopause'. This is now available on [IMS Webinars](#).

Recordings of the Clinical Colloquium in Midlife Women's Health sessions are available exclusively for IMS members [via this link](#). The sessions available are: 'Bone Health for the Generalist: Not just Osteoporosis', 'Cardiovascular Issues for Midlife Women', 'Cognition and Mood', 'Menopausal Hormone Therapy: Myths and Realities', 'A Mid-life Women's Health unit: Dos and Don'ts', 'Sexual Function: Essentials in Midlife', 'Managing Menopause without Hormones', 'Genitourinary Syndrome of Menopause: Not just vulvovaginal atrophy' and 'Breast Health Screening and Prevention'.

International Society Meetings 2023/24

19th World Congress International Academy of Human Reproduction

Date: 15th - 18th March 2023

Venice, Italy

For more information <https://hr2023.humanrepacademy.org/>

The 14th European Congress on Menopause and Andropause

Date: 3rd - 5th May 2023

Florence, Italy

For more information <https://2023.emas-online.org/>

11th International Symposium on Diabetes, Hypertension, Metabolic Syndrome and Pregnancy: Innovative Approaches in Maternal Offspring Health (DIP)

Date 4th - 6th May 2023

Thessaloniki, Greece

For more information <https://dip.comtecmed.com/>

The Mayo Clinic Transforming Women's Health Course

Date: 8th - 10th June 2023

Westin Chicago River North, Chicago, Illinois. You will have the option to either attend in-person or virtually. Please follow [this link](#).

North American Menopause Society Annual Meeting

Date: 27th - 30th September 2023

The 2023 NAMS Annual Meeting will take place from September 27-30, 2023 at the Marriott Downtown, Philadelphia, PA. For more information <https://www.menopause.org/annual-meetings/future-meetings>

15th European Society of Gynecology Congress

Date: 29th - 2nd December 2023

Venue: Europaplein 24, 1078 GZ Amsterdam, Paesi Bassi

For more information : [15 Congress of the European Society of Gynecology \(esgynology.org\)](https://www.esgynology.org/).

The IMS 19th World Congress on Menopause

Date: 19th - 22nd October 2024

Venue: Melbourne, Australia

Click here to download [First Announcement](#)

Menopause and mid-life women's health publication news

Menopause-like Symptoms May Strike Before the Menopause Transition

<https://www.eurekalert.org/news-releases/976142>

Could Altering Vaginal Microbiome Treat Vaginal Dryness and Painful Sex During Menopause?

<https://www.eurekalert.org/news-releases/977532>

Body Dissatisfaction Can Lead to Eating Disorders at Any Age

<https://www.eurekalert.org/news-releases/976796>

Primary Ovarian Insufficiency

<https://www.nejm.org/doi/full/10.1056/NEJMcp2116488>

Hormone Replacement Therapy (HRT) could help prevent Alzheimer's Dementia among women at risk of developing the disease - according to University of East Anglia research

<https://www.news-medical.net/news/20230113/Hormone-Replacement-Therapy-could-help-prevent-Alzheimers-Dementia-among-at-risk-women.aspx>

Free or Open Access with translated abstract to selected papers recently published in *Climacteric*

By way of a special arrangement with our publishers, Taylor & Francis, our journal *Climacteric* is able to offer Free Access to some recently published papers for a limited time.

Two papers from *Climacteric* 2023, Volume 26, February issue, chosen by our Editor, Professor Rodney Baber, have Free Access for the next three months. There are also two Open Access papers in the February issue.

The Abstracts from these Free Access and Open Access papers have been translated into Spanish. The Editor of *Climacteric* would like to thank Peter Chedraui, one of the Associate Editors, for providing the translations.

Association between testosterone and cognitive performance in postmenopausal women: a systematic review of observational studies

F. Sultana, et al.

<https://www.tandfonline.com/doi/full/10.1080/13697137.2022.2139600>

Free Access

Spanish translation:

Sultana F, Davis SR, Bell RJ, Taylor S, Islam RM. Asociación entre la testosterona y el rendimiento cognitivo en mujeres postmenopáusicas: una revisión sistemática de estudios observacionales. *Climacteric*. 2023;26(1):5-14.

Resumen

Esta revisión se realizó para explorar la asociación entre las concentraciones sanguíneas de testosterona endógena y el rendimiento cognitivo entre las mujeres postmenopáusicas comunitarias. Se realizaron búsquedas en las bases de datos de Ovid, MEDLINE, EMBASE, PsycINFO y Web of Science de estudios observacionales con al menos 100 participantes postmenopáusicas. Los resultados se clasificaron de forma narrativa según el diseño del estudio, el informe de la testosterona total o libre y las evaluaciones del riesgo de sesgo. Diez de los 26 artículos recuperados para la revisión de texto completo cumplieron con los criterios de inclusión, seis proporcionaron datos transversales, siete proporcionaron datos longitudinales y uno proporcionó datos de casos y controles. Las pruebas de rendimiento cognitivo difirieron entre los estudios. Ocho estudios midieron la testosterona por inmunoensayo, uno por cromatografía líquida-espectrometría de masas en tándem (CL-EM), y uno no especificó su metodología. Once diferentes dominios cognitivos fueron probados mediante 37 instrumentos diferentes. Independientemente del diseño del estudio, los hallazgos fueron inconsistentes y no concluyentes. Se informaron asociaciones tanto positivas como inversas para cada uno de la cognición global y el recuerdo verbal inmediato y tardío. La mayoría de los estudios no informaron una asociación entre la testosterona total o libre y el rendimiento cognitivo. Aunque esta revisión no demostró una asociación entre la testosterona y el rendimiento cognitivo en mujeres postmenopáusicas, los resultados deben considerarse no concluyentes debido a la imprecisión de la medición de la testosterona y la heterogeneidad metodológica de los estudios incluidos.

Palabras claves: Postmenopausia; andrógeno; función cognitiva; rendimiento cognitivo; demencia; testosterona

Menopause care delivery in the time of COVID-19: evaluating the acceptability of telehealth services for women with early and usual age menopause

S. L. Kozica-Olenski, et al.

<https://www.tandfonline.com/doi/full/10.1080/13697137.2022.2127351>

Free Access

Spanish translation:

Kozica-Olenski SL, Garth B, Boyle JA, Vincent AJ. Atención de la menopausia en tiempos de COVID-19: Evaluación de la aceptabilidad de los servicios de tele-salud para mujeres con menopausia temprana y de edad de aparición habitual. *Climacteric*. 2023;26(1):34-46.

Resumen

Objetivos: Este estudio tuvo como objetivo explorar las experiencias de mujeres y médicos y la

aceptabilidad del uso de la tele-salud dentro de un servicio de menopausia multidisciplinario especializado durante la pandemia de COVID-19.

Métodos: Se analizaron entrevistas semiestructuradas cualitativas en profundidad a través de enfoques inductivos temáticos. La aceptabilidad de la tele-salud se guió en el marco de tecnologías de no adopción, abandono y desafíos para la ampliación, difusión y sostenibilidad de salud y atención (NASSS).

Resultados: Se entrevistó a un grupo heterogéneo de 18 mujeres que acudieron al servicio de menopausia y seis clínicos (ginecólogos y endocrinólogos). La tele-salud fue percibida por la mayoría de las mujeres y los médicos como una forma aceptable de brindar atención de la menopausia. Se identificaron los beneficios de la entrega de tele-salud; siendo los temas centrados en la comodidad, mayor acceso a la atención y mayor seguridad. Los desafíos de la tele-salud incluyeron impactos percibidos en la calidad de la atención personalizada, problemas logísticos relacionados con la paciente y problemas organizativos/del sistema. Se recomendó un modelo híbrido de prestación flexible que combine la tele-salud y la atención presencial, luego de la relajación de las restricciones por la pandemia COVID-19. Se describieron las mejoras para apoyar la incorporación y adaptación de la tele-salud en la atención de rutina.

Conclusión: En este estudio, la tele-salud se consideró aceptable, lo que respalda la entrega continua de un modelo de servicio híbrido de tele-salud y atención de la menopausia presencial. Los hallazgos brindan información valiosa para mejorar el servicio de menopausia para satisfacer las necesidades de las mujeres durante la pandemia actual y más allá.

Palabras clave: COVID-19; Menopausia; investigación cualitativa; tele-salud

Impact of estetrol (E4) on hemostasis, metabolism and bone turnover in postmenopausal women

J. Douxfils, et al.

<https://www.tandfonline.com/doi/full/10.1080/13697137.2022.2139599>

Open Access

Spanish translation:

Douxfils J, Gaspard U, Taziaux M, Jost M, Bouvy C, Lobo RA, Utian WH, Foidart JM. Impacto del estetrol (E4) en la hemostasia, el metabolismo y el recambio óseo en mujeres postmenopáusicas. *Climacteric*. 2023;26(1):55-63.

Resumen

Objetivo: Este estudio tuvo como objetivo determinar los efectos del estetrol (E4) sobre la hemostasia, los lípidos, el metabolismo de los carbohidratos y el recambio óseo en mujeres postmenopáusicas.

Métodos: Este estudio fue un estudio de fase 2, multicéntrico, aleatorizado, doble ciego, controlado con placebo. Las participantes (n = 180, de 43 a 64 años de edad) recibieron 2.5 mg, 5 mg, 10 mg y 15 mg de E4 o placebo una vez al día durante 12 semanas. Se evaluaron los cambios desde el inicio hacia la semana 12 frente a placebo para los parámetros de hemostasia, globulina transportadora de hormonas sexuales (SHBG), lípidos, metabolismo de carbohidratos y marcadores óseos.

Resultados: Los cambios en los parámetros de hemostasia fueron mínimos con solo un pequeño aumento en el índice de sensibilidad de la proteína C activada normalizada en el grupo de 15 mg de E4 versus placebo. La SHBG aumentó en los grupos de E4 5 mg, 10 mg y 15 mg versus placebo. El colesterol de lipoproteínas de alta densidad aumentó en todos los grupos E4; los cambios no fueron consistentes para otros lípidos. Se observaron disminuciones significativas en comparación con el placebo para la resistencia a la insulina (grupo E4 10 mg), hemoglobina A1c (grupo E4 15 mg) y telopéptido C-terminal de colágeno tipo 1 (grupos E4 10 mg y 15 mg). Las pequeñas disminuciones de osteocalcina en los grupos de 5 mg, 10 mg y 15 mg de E4 fueron significativas frente al aumento observado en el placebo.

Conclusión: El E4 tuvo un impacto limitado sobre la hemostasia y efectos potencialmente beneficiosos sobre los lípidos, el metabolismo de los carbohidratos y el recambio óseo.

Palabras clave: El E4 tuvo un impacto limitado sobre la hemostasia y efectos potencialmente beneficiosos sobre los lípidos, el metabolismo de los carbohidratos y el recambio óseo.

Overexpression of miR-181a regulates the Warburg effect in triple-negative breast cancer

Y. Wang, *et al.*

<https://www.tandfonline.com/doi/full/10.1080/13697137.2022.2147821>

Open Access

Spanish translation:

Wang Y, Tahiri H, Yang C, Gu M, Ruan X, Hardy P. La sobreexpresión de miR-181a regula el efecto Warburg en el cáncer de mama triple negativo. *Climacteric*. 2023 Feb;26(1):64-71.

Resumen

Objetivo: El cáncer de mama triple negativo (CMTN) es muy agresivo y de mal pronóstico. El microRNA-181a (miR-181a) exhibe fuertes efectos antineoplásicos en muchos tipos de cáncer. En este estudio examinamos las respuestas de las células transfectadas de CMTN con miR-181a humano y exploramos los mecanismos subyacentes a los efectos observados.

Métodos: Se realizaron una serie de ensayos celulares utilizando células de la línea MDA-MB-231 de CMTN para evaluar el impacto de la sobreexpresión de miR-181a. La tasa de acidificación extracelular, la producción de lactato y la captación de glucosa se evaluaron como una medida de la glucólisis aeróbica (es decir, el efecto Warburg). Se analizaron las expresiones del gen relacionado con la glucólisis.

Resultados: Viability, migration and survival of miR-181a-transfected MDA-MB-231 cells were all significantly reduced. miR-181a inhibited glycolysis in TNBC cells by reducing the rates of glucose uptake and lactate production and a substantial downregulation of factors known to contribute to the Warburg effect, including the serine/threonine kinase, AKT3, hypoxia-inducible factor-1 α (HIF-1 α) and progesterone receptor membrane component 1 (PGRMC1). La viabilidad, la migración y la supervivencia de las células MDA-MB-231 transfectadas con miR-181a se redujeron significativamente. La miR-181a inhibió la glucólisis en las células CMTN al reducir las tasas de captación de glucosa y la producción de lactato y una regulación negativa sustancial de los factores que se sabe que contribuyen al efecto Warburg, incluida la serina / treonina quinasa, AKT3, factor inducible por hipoxia-1 α (FIH-1 α) y el componente 1 de membrana del receptor de progesterona (CM1RPG).

Conclusión: Nuestros resultados demuestran que la miR-181a puede regular la glucólisis en células CMTN MDA-MB-231, potencialmente a través de la interferencia con componentes de las vías AKT3-FIH-1 α y el CM1PGR. Estos resultados sugieren que la miR-181a podría desarrollarse como un agente terapéutico para su uso en regímenes antineoplásicos dirigidos a cánceres de mama que sobreexpresan CMTN y CM1RPG.

Palabras clave: AKT3; CM1PGR; cáncer de mama triple negativo; efecto Warburg; glucólisis; miR-181a.



1. Cold S, Cold F, Jensen MB, Cronin-Fenton D, Christiansen P, Ejlersen B. Systemic or Vaginal Hormone Therapy After Early Breast Cancer: A Danish Observational Cohort Study. *J Natl Cancer Inst.* 2022;114(10):1347-1354.

Background

Women treated for breast cancer (BC) often suffer genitourinary syndrome of menopause. These symptoms may be alleviated by vaginal estrogen therapy (VET) or menopausal hormone therapy (MHT). However, there are concerns of risks of recurrence of BC and death following treatment.

Objective

To determine the association of use of hormonal treatment (VET and MHT) with the risk of BC recurrence and mortality in a large population-based cohort of Danish postmenopausal women treated for early-stage estrogen receptor-positive (ER+) BC.

Design

- This study included longitudinal data from a national cohort of postmenopausal women, diagnosed 1997-2004 with early-stage invasive estrogen receptor-positive non-metastatic BC, who received no treatment or five years of adjuvant endocrine therapy.
- Authors ascertained prescription data on hormone therapy, VET or MHT, from a national prescription registry and evaluated mortality, and risk of recurrence, associated with use of VET and MHT vs non-use using multivariable models adjusted for potential confounders.

Main findings

- Among 8,461 women who had not received VET or MHT before BC diagnosis, 1957 and 133 used VET and MHT, respectively, after diagnosis.
- Median follow-up was 9.8 years for recurrence and 15.2 years for mortality.
- The adjusted relative risk of recurrence was 1.08 (95% confidence interval [CI] = 0.89 to 1.32) for VET (1.39 [95% CI = 1.04 to 1.85 in the subgroup receiving adjuvant aromatase inhibitors]) and 1.05 (95% CI = 0.62 to 1.78) for MHT.
- The adjusted hazard ratios for overall mortality were 0.78 (95% CI = 0.71 to 0.87) and 0.94 (95% CI = 0.70 to 1.26) for VET and MHT, respectively.

Take-home messages

- In postmenopausal women treated for early-stage estrogen receptor-positive BC, neither VET nor MHT was associated with increased risk of recurrence or mortality.
- A subgroup analysis revealed an increased risk of recurrence, but not mortality, in patients receiving VET with adjuvant aromatase inhibitors.

<https://pubmed.ncbi.nlm.nih.gov/35854422/>

2. Manoj P, Derwin R, George S. What is the impact of daily oral supplementation of vitamin D3 (cholecalciferol) plus calcium on the incidence of hip fracture in older people? A systematic review and meta-analysis. *Int J Older People Nurs.* 2023;18(1):e12492.

Background

Hip fractures have a huge impact in reducing the quality of life and increasing mortality.

Objective

The aim of this review was to assess the impact of daily oral supplementation of vitamin D3 plus calcium on the incidence of hip fracture in people over 65 years.

Design

- PRISMA guidelines were followed and RCTs that evaluated the effectiveness of daily oral supplementation of vitamin D3 plus calcium in preventing hip fracture in adults over 65 years were included in the study.
- The databases such as Cochrane Library, Embase, Medline, PubMed, CINAHL, Web of Science and Scopus were searched from October 2019 - January 2020.
- The Cochrane risk of bias tool was used to check the quality of the included studies.
- A meta-analysis with fixed effect model using Review Manager (Revman 5.3) was used to analyse the data.

Main findings

- The meta-analysis of seven RCTs on vitamin D3 plus calcium supplementation and hip fracture (n = 12,620) identified odds ratio (OR) of 0.75; 95% Confidence interval (CI): 0.64, 0.87; p = .0003.
- Daily oral supplementation of 800 IU of Vitamin D3 plus 1200 mg of calcium was found more effective (n = 5676 participants; OR = 0.69; 95% CI: 0.58, 0.82; p < .0001) than daily oral supplementation of 800 IU of Vitamin D3 plus 1000 mg of calcium (n = 6555, OR = 1.08; 95% CI: 0.74, 1.56; p = .70) in reducing hip fracture.
- A meta-analysis of the seven RCTs to identify the incidence of non-vertebral fracture gave the OR of 0.80; 95% CI: 0.72, 0.89; p < .0001.
- A meta-analysis of three RCTs on femoral neck bone mineral density (BMD) (n = 483) gave a mean difference of 1.21; 95% CI: -0.79, 3.20; p = .24.

Take-home messages

- Daily oral supplementation 800 IU of vitamin D3 plus 1200 mg of calcium reduces hip fracture and non-vertebral fracture in older people.
- Administering vitamin D3 and calcium supplements had no effect in increasing the femoral neck BMD.

<https://pubmed.ncbi.nlm.nih.gov/35842938/>

3. Kapoor E, Faubion SS, Gazzuola Rocca L, Mielke MM, Smith CY, Rocca WA. Trajectories of metabolic parameters after bilateral oophorectomy in premenopausal women. *Maturitas*. 2022;165:38-46.

Objective

To study the trajectories of metabolic parameters after bilateral oophorectomy.

Design

- This population-based cohort study included a random sample of all premenopausal women who underwent bilateral oophorectomy at or before age 45 years from 1988 to 2007 in Olmsted County, Minnesota, and their age-matched (± 1 year) referent women who did not undergo bilateral oophorectomy.
- The medical records of all women were reviewed to collect the metabolic parameters over a 10-year period.
- Authors compared three groups of women: 1) referent women (n = 270), 2) women who underwent bilateral oophorectomy and received estrogen therapy (n = 163), and 3) women who underwent bilateral oophorectomy and did not receive estrogen therapy (n = 107).

Main findings

- Over 10 years of follow-up, the three groups had significantly different mean values of diastolic blood pressure, weight, body mass index (BMI), total cholesterol, triglycerides, and high-density lipoprotein cholesterol (HDL-C).

- However, women with and without bilateral oophorectomy were already different at baseline for hyperlipidemia, systolic blood pressure, weight, and BMI.
- Nevertheless, the trajectories of change over 10 years were significant for weight (group by time interaction $p = 0.03$), BMI ($p = 0.03$), and HDL-C ($p = 0.004$).
- The changes occurred primarily in the initial 4-5 years.
- Women who received estrogen therapy after bilateral oophorectomy were comparable to the referent women with respect to the weight and BMI trends, and they experienced an increase in HDL-C over time.

Take-home message

Women who underwent bilateral oophorectomy before menopause experienced unfavorable changes in some metabolic parameters possibly increasing their cardiovascular risk.

<https://pubmed.ncbi.nlm.nih.gov/35905571/>

4. Vallejo MS, Blümel JE, Bencosme A, Calle A, Dextre M, Díaz K, López M, Miranda C, Ñañez M, Ojeda E, Rey C, Rodrigues MA, Salinas C, Tserotas K, Pérez-López FR. Factors affecting climacteric women with SARS-CoV-2 infection: A multinational Latin America study (REDLINC XI). Maturitas. 2022;165:33-37.

Objective

To evaluate the association between factors, especially those linked to the climacteric, and a history of COVID-19 infection.

Design

- This was an observational, cross-sectional, and analytical study in which women from ten Latin American countries, aged 40-64, who attended a routine health check-up were invited to participate.
- A positive history for COVID-19 was based on reverse transcription-polymerase chain reaction reports.
- Authors evaluated sociodemographic, clinical, lifestyle, anthropometric variables, and menopausal symptoms using the Menopause Rating Scale (MRS).

Main findings

- A total of 1,238 women were included for analysis, of whom 304 (24.6 %) had a positive history for COVID-19.
- The median [interquartile range: IQR] age of participants was 53 [IQR 12] years, duration of formal education was 16 [6] years, body mass index 25.6 [5.1] kg/m², and total MRS score 10 [13].
- In a logistic regression model, factors positively associated with COVID-19 included postmenopausal status and having a family history of dementia (OR: 1.53; 95 % CI: 1.13-2.07, and 2.40; 1.65-3.48, respectively), whereas negatively associated were use of menopausal hormone therapy (current or past), being a housewife, and being nulliparous (OR: 0.47; 95 % CI: 0.30-0.73; 0.72; 0.53-0.97 and 0.56; 0.34-0.92, respectively).
- Smoking, being sexually active, and use of hypnotics were also factors positively associated with COVID-19.

Take-home message

Postmenopausal status and a family history of dementia were more frequent among women who had had COVID-19, and the infection was less frequent among current or past menopause hormone therapy users and in those with less physical contact.

<https://pubmed.ncbi.nlm.nih.gov/35905570/>

5. Liu T, Chen S, Mielke GI, McCarthy AL, Bailey TG. Effects of exercise on vasomotor symptoms in menopausal women: a systematic review and meta-analysis. Climacteric. 2022;25(6):552-561.

Background

The frequency and severity of menopausal vasomotor symptoms negatively impact quality of life.

Objective

To systematic review evaluated the potential of exercise to relieve the subjective frequency and severity of vasomotor symptoms.

Design

- Authors searched four databases to identify randomized controlled trials (RCTs) that evaluated the effect of structured exercise (e.g. aerobic training) on the severity and/or frequency of vasomotor symptoms in menopausal women.
- Two reviewers independently screened records for eligibility, extracted data and assessed risks of bias and evidence certainty using the Cochrane tool and Grading of Recommendations Assessment, Development and Evaluation (GRADE).
- When suitable, data were pooled using random-effect meta-analyses.

Main findings

- Authors appraised 21 RCTs involving 2884 participants.
- Compared to no-treatment control, exercise significantly improved severity of vasomotor symptoms (10 studies, standardized mean difference [SMD] = 0.25; 95% confidence interval [CI]: 0.04 to 0.47, $p = 0.02$, very low certainty of evidence); the effect size was attenuated when studies with a high risk of bias were excluded (SMD = 0.11, 95% CI: -0.03 to 0.26, $p = 0.13$).
- No significant changes in vasomotor frequency were found between exercise and control (SMD = 0.14, 95% CI: -0.03 to 0.31, $p = 0.12$, high certainty of evidence).

Take-home messages

- In conclusion, exercise might improve vasomotor symptom severity.
- Future rigorous RCTs addressing the limitations of current review are warranted to explore the optimal exercise prescription principles to target the severity of vasomotor symptoms.

<https://pubmed.ncbi.nlm.nih.gov/35904028/>

6. Coborn J, de Wit A, Crawford S, Nathan M, Rahman S, Finkelstein L, Wiley A, Joffe H. Disruption of Sleep Continuity During the Perimenopause: Associations with Female Reproductive Hormone Profiles. J Clin Endocrinol Metab. 2022;107(10):e4144-e4153.

Background

- Nocturnal vasomotor symptoms (nVMS), depressive symptoms (DepSx), and female reproductive hormone changes contribute to perimenopause-associated disruption in sleep continuity.
- Hormonal changes underlie both nVMS and DepSx; however, their association with sleep continuity parameters resulting in perimenopause-associated sleep disruption remains unclear.

Objective

To determine the association between female reproductive hormones and perimenopausal sleep discontinuity independent of nVMS and DepSx.

Design

- Daily sleep and VMS diaries, and weekly serum assays of female reproductive hormones were obtained for 8 consecutive weeks in 45 perimenopausal women with mild DepSx, but no primary sleep disorder.
- Generalized estimating equations were used to examine associations of estradiol, progesterone, and follicle stimulating hormone (FSH) with mean number of nightly awakenings, wakefulness after sleep onset (WASO) and sleep-onset latency (SOL) adjusting for nVMS and DepSx.

Main findings

- Sleep disruption was common (median 1.5 awakenings/night, WASO 24.3 and SOL 20.0 minutes).
- More awakenings were associated with estradiol levels in the postmenopausal range ($\beta = 0.14$; 95% CI, 0.04 to 0.24; $P = 0.007$), and higher FSH levels (β [1-unit increase] = 0.12; 95% CI, 0.02 to 0.22; $P = 0.02$), but not with progesterone (β [1-unit increase] = -0.02; 95% CI, -0.06 to 0.01; $P = 0.20$) in adjusted models.
- Female reproductive hormones were not associated with WASO or SOL.

Take-home message

Associations of more awakenings with lower estradiol and higher FSH levels provide support for a perimenopause-associated sleep discontinuity condition that is linked with female reproductive hormone changes, independent of nVMS and DepSx.

<https://pubmed.ncbi.nlm.nih.gov/35878624/>

7. da Cruz GF, Lunz TM, Rocha de Jesus T, Costa MB, Vidigal CV, Albergaria BH, Marques-Rocha JL, Guandalini VR. Low appendicular skeletal muscle mass index is associated with the anthropometric variables of post-menopausal women. BMC Geriatr. 2022;22(1):639.

Background

Skeletal muscle mass is a central component of body composition and its decline is enhanced during ageing.

Objective

The authors verified the association between the appendicular skeletal muscle mass index (ASMI) with the anthropometric variables, biochemical variables, and lifestyle of postmenopausal women.

Design

- Cross-sectional observational study conducted with postmenopausal women.
- Sociodemographic, clinical, lifestyle, physical activity level, biochemical, and anthropometric markers were collected.
- Body composition was assessed by dual-energy densitometry.
- Multivariate logistic regression analysis was applied.

Main findings

- 114 women aged in average 66.0 ± 5.8 years were evaluated.
- There was a significant association between ASMI and age ($p = 0.004$), body mass ($p < 0.001$), body mass index (BMI) ($p < 0.001$), adductor pollicis muscle thickness (APMT) ($p < 0.001$), plasma calcium levels ($p = 0.003$), calf circumference (CC), and waist circumference (WC) ($p < 0.001$ for both).
- Adjusted regression analyses revealed the influence of BMI, CC, and APMT in the 1st tertile of ASMI ($p < 0.05$), BMI and CC in the 2nd tertile of ASMI.

Take-home messages

- ASMI was associated with BMI and muscle mass reserve indicators such as CC and DAPMT.
- In clinical practice, this indicates that simple, low-cost measures with good applicability can be used to predict and track the risk of depletion of skeletal muscle mass and consequent sarcopenia.

<https://pubmed.ncbi.nlm.nih.gov/35922763/>

8. Malik R, Pokeria C, Singh S. Correlation of Menopausal Symptoms with Serum Estradiol: A Study in Urban Indian Postmenopausal Women. J Obstet Gynaecol India. 2022;72(4):322-329.

Background

Menopause is a hypoestrogenic state. Menopausal symptoms like hot flushes, depression, joint pains and urinary symptoms all correlate with falling estrogen levels.

Objective

To correlate menopausal symptoms with serum estradiol levels.

Design

- 400 postmenopausal women who underwent natural menopause were included in the study conducted from Nov 2018 to March 2020.
- Surgical menopause, premature menopause and those on hormone replacement were excluded.
- Serum estradiol was measured and assessment of severity of menopausal symptoms was done using MRS questionnaire.
- MRS score of 0-4, 5-8, 9-15 and more than 16 were taken as none/minimal, mild, moderate and severe postmenopausal symptoms, respectively.
- Correlation between serum estradiol and symptoms was analyzed statistically.

Main findings

- Mean age of menopause in our study population was found to be 47.2 ± 3.96 years.
- Somatic symptoms were found maximum out of all three subscales in study population.
- Psychological subscale which included depression and mood changes was found to have the strongest correlation with serum estradiol level compared to other two subscales (somatic and genito-urinary).

Take-home messages

- Psychological symptoms, somatic symptoms and genitor urinary symptoms at menopause showed correlation with falling estrogen levels; with a maximum correlation of psychological symptoms found with low serum estradiol level.
- There is an inverse correlation of serum estradiol value with menopausal symptoms, with psychological symptoms (depression, anxiety, mood changes) showing highest correlation with low estrogen levels.

<https://pubmed.ncbi.nlm.nih.gov/35923503/>

9. Cherukuri L, Kinninger A, Birudaraju D, Jayawardena E, Manubolu VS, Brinton EA, Black D, Miller V, Kearns AE, Manson JE, Budoff MJ, Roy SK. Coronary artery calcium and bone mineral density by serial CTA: Does menopausal hormone therapy modify the association? Clin Imaging. 2022;90:26-31.

Background

- Both osteoporosis and cardiovascular disease (CVD) increase in women after menopause.

- Estrogen deficiency is thought to be an underlying mechanism for both these conditions.

Objective

To determine the association of menopausal hormone therapy with coronary artery calcium (CAC) and bone mineral density (BMD) determined by serial computerized tomographic (CT) scans.

Design

- Healthy menopausal women (n = 374, age 42-58 years) underwent cardiac CT scans over four years as participants in the Kronos Early Estrogen Prevention Study (KEEPS), a randomized, controlled trial in which women were randomized to either oral conjugated equine estrogens (o-CEE, n = 104), transdermal 17 β -estradiol (t-E2, n = 119) or placebo (n=115).
- CAC (Agatston units, AU), and BMD (mg/cm³) were measured from thoracic vertebrae at baseline and at the 4 years of the study using validated software.
- ANOVA and multiple linear regression analyzed the association between incident CAC or progression of CAC and BMD among the treatment groups.

Main findings

- At baseline 374 women, 40 participants with CAC >0 had greater decrements in BMD than the 334 participants with CAC = 0 at baseline.
- The average change in BMD in o-CEE group with CAC was -9.6 ± 13.3 versus -3.1 ± 19.5 in those with zero CAC, p = 0.0018.
- With t-E2, BMD changed by -11.7 ± 26.2 in those with CAC versus $+5.7 \pm 26.2$ in the zero CAC group, p ≤ 0.0001 .
- Similarly, in the 66 participants that showed progression of CAC >1, had more BMD loss, than those with stable CAC regardless of the treatment.

Take-home messages

- Progression of bone loss is reduced among women treated with o-CEE or t-E2.
- Progression of CAC is associated with greater BMD loss, a relationship that is differentially modified by t-E2 and o-CEE.

<https://pubmed.ncbi.nlm.nih.gov/35908457/>

10. Ma M, Liu X, Jia G, Liu Z, Zhang K, He L, Geng B, Xia Y. The association between depression and bone metabolism: a US nationally representative cross-sectional study. Arch Osteoporos. 2022;17(1):113.

Background

Depression, fractures, and osteoporosis are common in middle-aged and elderly, but their associations remain unclear.

Objective

To investigate the association between depression and bone mineral density (BMD), osteoporosis, and fracture in a middle-aged and elderly US population.

Design

- A nationally representative cross-sectional study used the National Health and Nutrition Examination Survey (NHANES) datasets.
- Depression was assessed and stratified using the Patient Health Questionnaire (PHQ-9).
- The multiple logistic regression models and the logistic binary regression models were used to analyze the association between depression and BMD, fractures, and osteoporosis.

- Gender, age, race, educational level, poverty ratio, body mass index (BMI), smoke, alcohol use, physical activity, and diabetes were included as covariates.
- Subgroup analysis was also conducted on gender, age, race, and education level.

Main findings

- In total, 9,766 participants were included after a series of exclusions, and 4,179 (42.79%) had at least mild depressive symptoms.
- Compared to the participants without depression, those with depression had a lower total femur, femoral neck, and total spine BMD after adjusting multiple covariates.
- The multivariable-adjusted logistic binary regression models demonstrated that participants with depression more likely have hip fractures (OR = 1.518, 95% CI: 1.377-2.703, P = 0.000), spine fractures (OR = 1.311, 95% CI: 1.022-1.678, P = 0.030), and osteoporosis (OR = 1.621, 95% CI: 1.388-1.890, P = 0.000).
- Subgroup analysis revealed that depressed participants who were males, non-Hispanic White, ≤ 70 years, and not highly educated had a lower BMD and easily had osteoporosis.

Take-home messages

- Depression was associated with lower BMD, particularly in the spine, males, Hispanic-White, and not highly educated populations.
- Moreover, people with depression were more likely to have fractures and osteoporosis.

<https://pubmed.ncbi.nlm.nih.gov/35962284/>

If you would like to comment or contribute to Our Menopause World, please email Editor Claire Bower claire.bower@imsociety.org



*Copyright © *2021 The International Menopause Society, All rights reserved.*

Our mailing address is:

rebecca.cheshire@imsociety.org

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).