

#### Menopause

# **Current Awareness Bulletin**

#### **November 2024**

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#### Research

1. The effectiveness of yoga on menopausal symptoms: A systematic review and metaanalysis of randomized controlled trials.

Authors: Wang H.; Liu Y.; Kwok J.Y.Y.; Xu F.; Li R.; Tang J.; Tang S. and Sun, M.

**Publication Date: 2025** 

**Journal:** International Journal of Nursing Studies 161(pagination), pp. Article Number:

104928. Date of Publication: January 2025

Abstract: Background: The highly prevalent menopausal symptoms among women, along with their deleterious health impacts, call for increased attention to the need for effective interventions targeting this growing public health problem. While increasing evidence demonstrates that yoga interventions benefit menopausal symptoms, no systematic review or meta-analysis has yet systematically examined the effectiveness of yoga on menopausal symptoms. Objective: To systematically examine the effectiveness of Yoga in improving menopausal symptoms, hot flashes, depressive symptoms, anxiety, sleep quality, body mass index, systolic blood pressure, diastolic blood pressure, and quality of life among women with menopause. Design: Systematic review and meta-analysis. Methods: Nine electronic databases, including PubMed, Web of Science, PsycINFO, Science Direct, EMBASE, Cochrane Central, CINAHL, WanFang, and the Chinese National Knowledge Infrastructure, were searched from their inception to March 3, 2024, and updated on August 1, 2024. Randomized controlled trials investigating Yoga interventions for women experiencing menopause were included in this study. The quality of the included studies was assessed using the Cochrane Collaboration's 'risk of bias' tool. Meta-analyses were conducted using RevMan 5.4.1 and Stata 18.0. Results: A total of 1302 articles were initially identified. Eventually, 24 studies (n = 2028 individuals) were included in this systematic review. The pooled analysis demonstrated that Yoga had significant beneficial effects on total menopausal symptoms (95 % CI: - 1.62 to - 0.73), psychological menopausal symptoms (95 % CI: - 1.87 to - 0.68), somatic menopausal symptoms (95 % CI: - 1.37 to - 0.39), urogenital menopausal symptoms (95 % CI: - 0.97 to - 0.59), sleep quality (95 % CI: - 1.97 to - 0.62), anxiety (95 % CI: -1.82 to -0.09), depressive symptoms (95 % CI: -2.36 to -0.74), body mass index (95 % CI: - 1.61 to - 1.08), systolic blood pressure (95 % CI: - 7.71 to - 5.33), and diastolic blood pressure (95 % CI: - 5.96 to - 4.24). However, no significant differences were observed between Yoga and usual care in terms of hot flashes (95 % CI: - 1.00 to 0.37) and quality of life (95 % CI: - 0.50 to 1.82). Conclusions: Yoga significantly improved menopausal symptoms, sleep quality, anxiety, depressive symptoms, body mass index, systolic blood

pressure, and diastolic blood pressure among women with menopause. This suggests that integrating yoga interventions into clinical practice has the potential to address the significant burden of menopause-related outcomes. Future studies should employ robust designs and utilize large-scale samples to evaluate the optimal dosage of yoga, its long-term effects and underlying mechanisms, its cost-effectiveness, and its safety in menopausal symptom management.

2. The Effect of Hypnotherapy Methods On The Quality Of Life Of Menopausal Women Through The Assessment Of The Menopause Specific Quality Of Life (Menqol) Modification Scale And Serotonin Biomarkers.

Authors: Basoeki R.A.; Wajib Y.Y.P.; Setijowati N. and Hariyanti, T.

**Publication Date: 2024** 

Journal: South Eastern European Journal of Public Health 25, pp. 51–58

Abstract: Objective: This study was conducted to measure the potential of hypnotherapy in improving the quality of life of menopausal women, through an assessment study of the Menopause Specific Quality of Life (MenQoL) and Serotonin modification scale. Materials and Methods: The study uses a quasi-experimental design with a pretest-posttest group control approach. Data collection in Malang with menopausal female respondents (45-60 years old), treatment group 75 and control 75. Implantation is carried out 2 times with an interval of 4 mg. It will be carried out from March 2023 to May 2023. Results: Results of the assessment of the MenQoL modified scale questionnaire (44 items) with 30 respondents: The validity test of the questionnaire with an r value between 0.958-0.998 (meaning: Valid) and the reliability test (Cronbach's Alpha) r = 1.00 (meaning: Very High). Results of the Hypnotherapy Effect test on MenQoL (wilcoxon): p-value 0.000 (significantly different) in the experimental group and pvalue 0.357 (no significant difference) in the control group. Results of the Hypnotherapy Effect test on Serotonin Biomarkers (wilcoxon test): p-value 0.000 (significantly different) in the experimental group and p-value 0.219 (no significant difference) in the control group. The results of the difference ( $\Delta$ ) between the pre and post averages: MenQoL experiment -31.58 < MenQoL control 3.95 and Serotonin experiment -2,733.48 < Serotonin control 51,241.92. Results of the normalized gain test (strength) of MenQoL with decreasing value (improvement): 86.6% of the experimental group and MenQoL with increased value (deterioration): 57.3%. Serotonin with increased values (improvement): 100 % of the experimental group and Serotonin with decreased values (improvement): 52 %. Conclusion: Hypnotherapy provides improvement in the quality of life of menopausal women through improvement of MenQoL and improvement of Serotonin biomarkers.

## 3. Women's Experiences of Intimate and Sexual Relationships During Menopause: A Qualitative Synthesis.

Authors: Bulut H.; Hinchliff S.; Ali P. and Piercy, H.

**Publication Date: 2024** 

**Journal:** Journal of Clinical Nursing (pagination), pp. Date of Publication: 2024

**Abstract:** Aim: The aim of this literature review was to explore women's experiences of their intimate and sexual relationships during menopause. Background: Evidence shows that the menopause transition can be a difficult time for women due to symptoms of menopause. There is little research evidence about how menopause-related symptoms impact women's intimate and sexual relationships. Method: A qualitative synthesis was carried out on research published between May 2005 and July 2023 using five electronic databases: ASSIA, CINAHL, PubMed, PsycINFO and Web of Science. We also searched Google Scholar and used backward and forward chaining methods to identify results not listed in the databases and ensure that no relevant literature was omitted. Results: Eighteen qualitative studies were included in this review. Six main themes were identified: the meaning of menopause to women in different cultures; factors affecting women's sexual lives; changes in sexual desire and orgasm; talking about sexual issues; women's attempts to overcome the impact of ageing and menopause on their sexual lives; and concerns about partner sexual satisfaction during the menopause. Conclusion: During the menopause transition, women can experience sexual difficulties that have an impact on their lives and intimate relationships. Qualitative studies showed that sexual changes associated with menopause can be difficult to manage and must be viewed in the social and cultural contexts of the women's lives. Relevance to clinical practice: The results of this review will be of interest to nurses to assess patient needs while offering health services to women in menopause. In addition, the results can be used to inform education and support programmes for women. Reporting method: We have adhered to relevant EQUATOR guidelines and used the PRISMA-ScR reporting method. No patient or public contribution was required for this study.

### 4. Menopausal hormone therapy and incidence, mortality, and survival of breast cancer subtypes: a prospective cohort study.

Authors: Busund, Marit; Ursin, Giske; Lund, Eiliv; Chen, Sairah Lai Fa and Rylander, Charlotta

Publication Date: Nov 04,2024

**Journal:** Breast Cancer Research 26(1), pp. 151

**Abstract: BACKGROUND**: Menopausal hormone therapy (MHT) is associated with an increased risk of postmenopausal breast cancer, predominantly the luminal A-like subtype. The impact of MHT on deaths from breast cancer subtypes is less understood. This study aimed to explore associations between MHT use and the incidence, mortality, and survival of intrinsic-like breast cancer subtypes. **METHODS**: Data from 160,881 participants with selfreported MHT use from the prospective Norwegian Women and Cancer Study were analyzed. Among them, 7,844 incident breast cancer cases, and 721 breast cancer-specific deaths occurred. Cox proportional hazard regression was performed to calculate hazard ratios (HRs) with 95% confidence intervals (CIs) for the association between MHT use and the incidence, mortality, and survival of breast cancer subtypes. RESULTS: MHT use was associated with increased risk of overall, luminal A-like, and luminal B-like breast cancer, with respective HRs of 1.44 (95% CI 1.36-1.52), 1.41 (95% CI 1.31-1.52), and 1.23 (95% CI 1.09-1.40) among current estrogen-progestin therapy (EPT) users compared with never users. The risk increased by 4%, 4%, and 2% per year of EPT use for overall, luminal A-like, and luminal Blike breast cancers, respectively. MHT use was also associated with increased risk of overall and luminal A-like breast cancer mortality, with HRs 1.61% (95% CI 1.36-1.91) and 2.15%

(95% CI 1.51-3.05) increased risk among current EPT users compared with non-users. Among patients with breast cancer, pre-diagnostic MHT use was not associated with worse survival from overall breast cancer but was inversely associated with survival from triple-negative breast cancer (TNBC; HR death 0.41; 95% CI 0.24-0.73 among current users). Results varied significantly according to tumor subtype (pheterogeneity = 0.02). **CONCLUSIONS**: Our study suggests that MHT use increases the risk of incident and fatal overall and luminal A-like, and incident luminal B-like breast cancer but does not decrease overall survival among patients with breast cancer. Further research is needed to elucidate the mechanisms underlying MHT use and breast cancer lethality, and to explore whether MHT use among patients with TNBC is indeed free from harm. Copyright © 2024. The Author(s).

### 5. Minimal dose resistance training enhances strength without affecting cardiac autonomic modulation in menopausal women: a randomized clinical trial.

Authors: Dias R.K.N.; Penna E.M.; Noronha A.S.N.; Neto O.B.; Monteiro E.P. and Coswig, V. S.

**Publication Date: 2024** 

**Journal:** Scientific Reports 14(1) (pagination), pp. Article Number: 19355. Date of Publication: December 2024

**Abstract:** The proposition of a minimal dose of resistance training (RT) to elicit health benefits, encompassing physiological and psychological aspects, has garnered attention. While empirical investigations have demonstrated the efficacy of low-volume RT protocols in inducing adaptations such as enhanced strength and functional capacity, further exploration of the effects of this paradigm across a broader spectrum of variables is warranted. Thus, this study aimed to investigate the effects of minimal dose RT on strength and functional capacity, cardiac autonomic modulation, and hemodynamic parameters in menopausal women. Twentysix women were randomly assigned to the training (TG: 63.2 +/- 9.3 years) or control group (CG: 59.3 +/- 7.6 years). Anthropometric measurements, strength and functional performance tests, cardiac autonomic assessment, and hemodynamic parameters were performed before and after four weeks of intervention. The TG performed the minimum dose RT twice weekly for four weeks (2 sets of 8-12 repetitions in three dynamic exercises, plus three 1-min isometric planks), and the CG had a weekly meeting with lectures and stretching. Two-way ANOVA with repeated measures was applied to each variable. Regarding time comparisons, there was a significant increase for LniRR (F = 4.78; omega<sup>2</sup> = 0.046; p = 0.04), one repetition maximum (1RM) bench press (F = 8.06; omega<sup>2</sup> = 0,013; p = 0.01), and 1RM leg press (F = 17.3; omega<sup>2</sup> = 0,098; p = 0,098; p  $^2$  = 0.042; p = 0.03), and 1RM bench press (F = 9.52; omega<sup>2</sup> = 0,016; p = 0.01). No between-group main effect for any variable was found. The minimal dose RT protocol improved muscle strength, while cardiac autonomic and hemodynamic variables, as well as functional capacity, remained stable over 4 weeks in menopausal women.

6. Epidemiology and clinical outcomes of vasomotor symptoms among perimenopausal women and women aged 65 years or older in the US: a systematic review.

**Authors:** Gibson C.J.;Ajmera M.;O'Sullivan F.;Shiozawa A.;LozanoOrtega G.;Badillo E.;Venkataraman M. and Mancuso, S.

**Publication Date: 2024** 

**Journal:** Women and Health 64(9), pp. 687–703

Abstract: Vasomotor symptoms (VMS) are the hallmark of menopause and negatively affect a large proportion of women over many years. However, studies evaluating the overall impact of VMS are limited. This systematic review (SR) aimed to examine epidemiological, clinical, humanistic, and economic outcomes of VMS among perimenopausal women and among women aged >=65 years in the US. A systematic search of the MEDLINE and Embase databases was conducted to identify observational studies (2010-2022) reporting on these populations. Data reporting outcomes of interest were extracted and analyzed descriptively. Of 7,613 studies identified, 34 met inclusion criteria, of which 30 reported on perimenopausal women and 4 reported on VMS in women aged >= 65 years. VMS and severe/moderate-tosevere VMS were reported by 48.4-70.6 percent and 13.0-63.1 percent, respectively, of perimenopausal women. Mean VMS duration was 2.6 years, and median duration ranged from 7.4 to 10.1 years among women with onset in early perimenopause and from 3.8 to 6.1 years among those with onset in late perimenopause. Among women aged >=65 years, 20.9-45.1 percent reported VMS; 2.0 percent reported severe symptoms, and 17.6 percent reported moderate symptoms. No studies reported VMS frequency and duration or the economic or humanistic burden among women aged >=65 years. In conclusion, high VMS frequency and severity were observed among perimenopausal women and women aged >=65 years in the US in this SR, highlighting the need for (1) better management of VMS to reduce frequency and severity and (2) further research to clarify the impact of VMS on disease burden, quality of life, and economic impact.

### 7. Quality improvement project - Reducing the inadvertent prescribing of unopposed estrogen in primary care Dr Liz Horrocks Banstead PCN.

Authors: Horrocks L.; Holloway D.; Rymer J. and Bruce, D.

**Publication Date: 2024** 

Journal: Post Reproductive Health 30(3), pp. 190-194

Abstract: Objective: The aim of the project was to reduce the risk of patients using the estrogen only part of their hormone replacement therapy (HRT) inadvertently in Banstead PCN. Although understanding about the risk of unopposed estrogen is well understood by prescribers, there are numerous flash points where this exposure can occur which was highlighted by several cases encountered during a study period of 3 months. Study design: Cases encountered revealed numerous reasons for this exposure which were split into three areas: Prescribing factors, dispensing checks and patient understanding. Main outcome measures: Quality improvement suggestions were tailored to the factors involved. IT system changes to EMIS, our main computer software provider, were proposed to enable safer prescribing. Following discussion with key stakeholders, increased education for pharmacists was proposed alongside an alert sticker system at the dispensing end point. Patient understanding and education for all parties was delivered through various routes. Results: The IT system alterations required are complex and still awaited. Funding was obtained and stickers distributed. The results from a re-audit from this intervention are awaited. Interim

education measures at an individual level were meantime explored and the impact of them assessed. Patient education and the role of social media were explored. I produced a short video which was circulated to doctors with the plan to distribute via other clinician social media accounts. Conclusions: A key discovery through this study is that many of the flash points identified can be difficult to detect and many are not measurable. The increasing number of HRT prescriptions, time pressures in primary care and the known risk from using unopposed estrogen of endometrial cancer means these changes are of potential great value.

### 8. The effects of motivational interviewing on sexual quality of life and sexual self-efficacy in postmenopausal women with sexual dysfunction.

Authors: Kamalak H. and Aksoy Derya, Y.

**Publication Date: 2024** 

**Journal:** Menopause 31(10), pp. 862–870

Abstract: Objective This study was conducted to determine the effects of motivational interviewing on sexual quality of life and sexual self-efficacy in postmenopausal women with sexual dysfunction. Methods This randomized controlled study was conducted with 164 postmenopausal women with sexual dysfunction who presented to the gynecology outpatient clinic of a university hospital in Kahramanmaras, Turkiye (82 experimental, 82 control). The data were collected using a personal information form, the Arizona Sexual Experiences Scale-Female Version Questionnaire, the Sexual Quality of Life-Female Questionnaire, and the Sexual Self-Efficacy Scale. Four motivational interview sessions were conducted with the postmenopausal women in the experimental group at 1-week intervals, and those in the control group did not receive any intervention. The data were analyzed using descriptive statistics, Pearson's chi-squared test, and independent samples and paired samples t tests. Results Both the sexual quality of life and sexual self-efficacy levels of the participants in the experimental and control groups were similar in the pretest stage (P > 0.05). After the motivational interviews with those in the experimental group, the rate of sexual dysfunction was determined as 82.9% in the experimental group and 98.8% in the control group. Additionally, after the motivational interviews, the sexual dysfunction scores of the participants in the experimental group decreased significantly, and their sexual quality of life and sexual self-efficacy levels increased significantly compared to those in the control group (P < 0.001). Conclusions The results of this study revealed that motivational interviewing decreased sexual dysfunction and increased sexual quality of life and sexual self-efficacy in postmenopausal women with sexual dysfunction.

#### 9. Health-related quality of life associated with coexisting chronic conditions in postmenopausal women

Authors: Lee, Bo Gyeong and Lee, Haein

**Publication Date: 2024** 

Journal: Health Care for Women International 45(11), pp. 1220–1234

Abstract: We aimed to examine the association between metabolic syndrome (MetS), depressive symptoms, and health-related quality of life in postmenopausal women. We conducted a descriptive cross-sectional study in naturally postmenopausal women aged 45–65 years using data from the 8th Korea National Health and Nutrition Examination Survey. We classified the participants into four groups: normal (neither MetS nor depressive symptoms), MetS, depressive symptoms, and MetS + depressive symptoms. Compared to the other three groups, the MetS + depressive symptoms group had the worst self-rated health. High fasting glucose, high triglyceride and low high-density lipoprotein-cholesterol levels were the most common in the MetS + depressive symptoms group. After adjusting for covariates, the MetS + depressive symptoms group was more likely to have problems with usual activities and pain/discomfort than the normal group.

#### 10. Menopause in Plastic Surgery Patients: An Underrecognized and Undertreated Comorbidity.

Authors: Malphrus E.L.; Perelmuter S.; Rubin R. and Percec, I.

**Publication Date: 2024** 

**Journal:** Plastic and Reconstructive Surgery 154(4), pp. 901–908

Abstract: Nearly half of all patients undergoing plastic surgery are middle-aged cisgender women, all of whom will experience menopause. Plastic surgeons do not treat menopause directly, but it can be a concern-and even a motivating factor-for patients seeking plastic surgery. In addition, the changes associated with menopause underlie problems that many plastic surgeons seek to address, including with face lifts, breast surgery, and vaginal rejuvenation. Hormone replacement therapy has the potential to improve quality of life by treating bothersome symptoms and delaying the physical changes brought on by loss of estrogen. However, recent reports in the media highlight that women face significant barriers to accessing menopause care due to a lack of trained providers willing to manage hormone replacement therapy, as well as historical concerns regarding increased cancer risk, which recent evidence suggests were overestimated. Plastic surgeons may be the first, or only, providers with whom women discuss how their bodies change with age. As a result, plastic surgeons should consider menopause as an underlying risk factor or comorbidity for any woman presenting with aging-related complaints, and to ensure that these patients have access to appropriate menopause care in their communities. This is especially important for surgeons offering vaginal rejuvenation therapies, given that locally acting topical estrogen is a safe and highly effective treatment. The authors present guidance and recommendations for how plastic surgeons should take menopause into account when evaluating and advising patients. In addition, the authors present a treatment algorithm for safe prescribing of locally acting hormone replacement therapy for vaginal rejuvenation.

#### 11. The evolving perspective of menopause management in the United Kingdom.

Authors: Mansour D.; Barber K.; Chalk G.; Noble N.; Digpal A.A.S.; Talaulikar V. and Gray, S.

**Publication Date: 2024** 

Journal: Women's Health 20(pagination), pp. Date of Publication: January-December 2024

**Abstract:** Background: The use of menopausal hormone therapy (MHT) was significantly reduced following the publication of the Women's Health Initiative study results and has remained low ever since. However, from 2015 onwards, the UK has seen a substantial increase in MHT prescribing compared to other European countries. Objectives: To evaluate the factors contributing to the shift in women's and healthcare professionals' (HCPs) perception of MHT in the United Kingdom and to provide learning points for other European countries. Design: An exploratory, descriptive and qualitative study. Methods: An interactive virtual panel discussion in which seven UK-based HCPs with a special interest in the menopause discussed the evolution of its management in the United Kingdom. Results: In the last 8 years, there has been a substantial increase in MHT prescriptions in the United Kingdom due to improved menopause awareness and acceptance of MHT. Accessibility to accurate, scientific, information and guidance from respected institutions is one of the main drivers of this change. Social media has increased that reach with 'influencers' empowering women to seek help. Women are demanding access to menopause health care so that they can receive holistic and individualized treatment based on their clinical conditions and needs. Standardized education of HCPs is an essential pillar to provide appropriate and equitable care to menopausal women and to guarantee safe prescribing of MHT. Furthermore, up to date and factually correct menopausal education would benefit all the population. Conclusions: Publication of new scientific data reporting a more favourable benefit/risk ratio with MHT, production of national guidance and an increased awareness via social media have led to the significant rise in MHT prescribing and improvement of menopause care in the United Kingdom. The lessons learned may benefit other European countries.

### 12. Protective and harmful social and psychological factors associated with mood and anxiety disorders in perimenopausal women: A narrative review.

Authors: McElhany K.; Aggarwal S.; Wood G. and Beauchamp, J.

**Publication Date: 2024** 

**Journal:** Maturitas 190(pagination), pp. Article Number: 108118. Date of Publication:

December 2024

Abstract: Perimenopause is often called a window of vulnerability for the development or exacerbation of mood and anxiety disorders. Evidence points to social and psychological factors contributing to the onset of mood and anxiety disorders or the symptoms of depression and anxiety during perimenopause. Therefore, the purpose of this narrative review was to synthesize the findings of studies examining associations between social and psychological factors and the development of mood and anxiety disorders and the symptoms of depression and anxiety during perimenopause. PsychINFO, Ovid MEDLINE, and CINAHL were searched for studies (published between January 2014 and November 2023) assessing the social and psychological factors associated with perimenopausal mood and anxiety disorders and the symptoms of depression and anxiety. These factors were categorized as either protective or harmful. Study quality was assessed using STROBE guidelines. The search yielded 17 studies. Social support was identified as a social factor protective against perimenopausal depression and anxiety. Resiliency characteristics were reported to be protective psychological

factors associated with fewer depressive symptoms. Mental health history, family history of major depressive disorder, trait anxiety and neuroticism, stressful life events, adverse childhood events, and chronic stress were categorized as harmful psychological factors associated with depression during perimenopause. Limited research has been conducted to understand factors associated with perimenopausal anxiety. The identification of these social and psychological factors associated with mood and anxiety disorders during perimenopause will help lead to earlier detection of women at risk and the development of multifaceted interventions.

13. Efficacy and safety of an ultra-low-dose 0.005 % estriol vaginal gel in the prevention of urinary tract infections in postmenopausal women with genitourinary syndrome of menopause: A randomized double-blind placebo-controlled trial.

**Authors:** Muinos Fernandez N.;Martinez Salamanca J.I.;Pardo Gonzalez de Quevedo J.I.;Diz Morales M.P.;Palomo Alameda L.;Duce Tello S.;Gonzalez Bejar M.;Rabanal Carrera A.;Rosado Martin J.;Noguera Vera L.;Doyle Sanchez A.;Rodriguez Mariblanca A. and Garcia Aguilar, E.

**Publication Date: 2024** 

Journal: Maturitas 190(pagination), pp. Article Number: 108128. Date of Publication:

December 2024

**Abstract:** Objectives: This study evaluated the efficacy of an ultra-low-dose 0.005 % estriol vaginal gel in the prevention of urinary tract infections in postmenopausal women with genitourinary syndrome of menopause. Study design: Randomized, double-blind, placebocontrolled, multicenter clinical trial conducted across 28 Spanish sites involving specialists in gynecology, urology, and primary care. A total of 108 postmenopausal women were randomly assigned in a 1:1 ratio to receive 1 g of vaginal gel with 50 micrograms of estriol or an identical moisturizing vaginal gel without estriol. Main outcome measures: The primary outcome was the number of episodes of urinary tract infection by the end of the 24-week treatment. Secondary measures encompassed percentage of patients without recurrence, time to first recurrence, use of antibiotic treatment, vaginal pH, safety, and tolerability, among others. Results: The incidence rate of urinary tract infections (new cases per 100 women-year) was 26 % lower in the group that received estriol vs. the group that received placebo (32.34 vs. 43.76 (RR = 0.74) p < 0.001). The frequency of urinary tract infections fell during treatment in all patients in the estriol group. Favorable pH changes from baseline were observed in the estriol arm at all follow-up visits. Conclusions: Ultra-low-dose 0.005 % estriol vaginal gel is safe and effective in preventing recurrent urinary tract infections in postmenopausal women with genitourinary syndrome of menopause, reducing the incidence and potentially decreasing the susceptibility to urogenital infections by improving vaginal pH.

### 14. Women's expectations for system support for a healthy menopausal transition: A pilot study.

Authors: Nieroda, Marzena; Posso, Dania and Seckam, Abdul

Publication Date: De ,2024

Journal: Maturitas 190, pp. 108133

**Abstract: BACKGROUND**: This pilot study contributes to the knowledge on healthy menopause by adopting a person-centric, lifelong approach to support a healthy menopausal transition. It focuses on women's expectations of system support for this transition. **METHOD**: Twenty-two online in-depth interviews were conducted with women of various ages, experiences, and backgrounds in the United Kingdom, ensuring representation across the menopausal transition journey - before, during and after menopause. The interviews explored perceptions and expectations of healthy menopause and the required support. User journey and systems frameworks guided data collection and analysis. The pilot aimed to verify the feasibility of the developed study approach and protocol. RESULTS: A healthy menopausal transition is seen as preserving essential capacities to maintain normal daily activities despite bodily changes, a crucial aspect of ageing. Participants outlined a journey of awareness, contemplation of lifestyle adjustments, experimentation with new behaviours, and habit formation. These findings underscore the importance of fostering awareness and support for menopausal transition early in life. Participants also stressed the impact of the broader environment across the ageing journey, including education, research, health services, workplace dynamics, built environment, food industry, technology and innovation, media, advertising, and social networks. **CONCLUSIONS**: This work highlights person-centric perceptions of healthy menopause, complementing existing biology-centred perspectives. By introducing a co-creation approach at the system level, it offers opportunities to define holistic support for the menopausal transition. The findings informed a knowledge exchange and ideation workshop with forty relevant system stakeholders to advance solution co-creation. Copyright © 2024 The Authors. Published by Elsevier B.V. All rights reserved.

### 15. Quality of life in heterosexual menopausal women: The indirect effect of sexual and marital satisfaction, menopause representations, and psychological morbidity

Authors: Pereira, M. G.; Bernardo, Ana Cristina; Fernandes, Iolanda and Almeida, Ana C.

**Publication Date: 2024** 

**Journal:** Health Care for Women International 45(11), pp. 1235–1253

Abstract: Menopause may negatively impact Quality of Life (QoL). Our study used a cross-sectional design and research participants were 99 women in natural menopause. In our study, we analyzed the relationship between age at menopause onset, hormone therapy use, duration of couple relationship, menopause duration, psychological morbidity, marital satisfaction, menopause representations, and QoL following the Wilson and Cleary Health-Related QoL conceptual model. The authors found that negative representations, lower marital satisfaction, psychological morbidity, and shorter duration of menopause contributed to lower QoL. Moreover, the authors found that psychological morbidity and menopause representations (identity and control/cure dimensions) had an indirect effect between marital satisfaction and vasomotor, psychosocial, and sexual QoL. Also, we found that age at the onset of menopause showed a moderating effect in the final model. Future studies should replicate these results in a longitudinal design and analyze how the variables that showed a moderating role and indirect effects will function as moderators and mediators, respectively, over time.

### 16. A systematic review and meta-analysis investigating differences in chronic inflammation and adiposity before and after menopause.

**Authors:** Pernoud L.E.;Gardiner P.A.;Fraser S.D.;DillonRossiter K.;Dean M.M. and Schaumberg, M. A.

**Publication Date: 2024** 

Journal: Maturitas 190(pagination), pp. Article Number: 108119. Date of Publication:

December 2024

Abstract: Background: Menopause represents a pivotal physiological transition characterized by hormonal fluctuations and an augmented susceptibility to chronic diseases. The relationship between menopause and heightened disease risk may be attributed in part to alterations in low-grade chronic inflammation and adiposity. Methods: Three databases were searched for studies assessing differences in inflammation and body adiposity between pre- and postmenopausal women. Meta-analysis examined the association between menopausal status and key inflammatory biomarkers, including leptin, adiponectin, interleukin-6, tumour necrosis factor-α and c-reactive protein, and indices of body adiposity (fat mass, waist circumference, waist-to-hip-ratio and body mass index). The National Institute of Health Quality Assessment Tool for Observational and Cross-sectional studies was used to evaluate quality of studies, and GRADE-assessed evidence certainty. Results: Levels of adiponectin and leptin were higher in postmenopausal women than in premenopausal women [(1.30 µg/ml, 95 % CI; 0.56 to 2.03  $\mu$ g/ml, p = 0.001), (0.88 ng/ml; 95 % CI: 0.22 to 1.52; p = 0.008)]. A trend towards significance was observed for tumour necrosis factor-α (0.59 pg/ml, 95 % CI; -0.07 to 1.26 pg/ml, p = 0.080), with no significant differences in interleukin-6 and c-reactive protein [(0.83)] pg/ml, 95 % CI; -0.24 to 1.91 pg/ml, p = 0.128), (0.06 mg/ml, 95 % CI; -0.17 to 0.29, p = 0.606)]. Postmenopausal women had greater waist circumference, waist-to-hip-ratio and body mass index than premenopausal women [(0.74 cm; 95 % Cl: 1.02 to 0.47; p  $\leq$ 0.001), (0.78; 95 % CI: 1.47 to -0.09; p = 0.027), (0.31 kg/m2; 95 % CI: 0.50 to 0.12; p = 0.001)]. Conclusions: Postmenopausal women had higher adipokine levels and greater adiposity. However, given the low certainty of the available evidence, future prospective cohort studies assessing inflammatory changes over the menopausal transition are warranted to inform future clinical decisions.

17. Risk-prediction models in postmenopausal patients with symptoms of suspected ovarian cancer in the UK (ROCkeTS): a multicentre, prospective diagnostic accuracy study.

**Authors:** Sundar S.;Agarwal R.;Davenport C.;Scandrett K.;Johnson S.;Sengupta P.;SelviVikram R.;Kwong F.L.;Mallett S.;Rick C.;Kehoe S.;Timmerman D.;Bourne T.;Van Calster B.;Stobart H.;Neal R.D.;Menon U.;GentryMaharaj A.;Sturdy L.;Ottridge R., et al

**Publication Date: 2024** 

Journal: The Lancet Oncology 25(10), pp. 1371-1386

Abstract: Background: Multiple risk-prediction models are used in clinical practice to triage

patients as being at low risk or high risk of ovarian cancer. In the ROCkeTS study, we aimed to identify the best diagnostic test for ovarian cancer in symptomatic patients, through head-tohead comparisons of risk-prediction models, in a real-world setting. Here, we report the results for the postmenopausal cohort. Methods: In this multicentre, prospective diagnostic accuracy study, we recruited newly presenting female patients aged 16-90 years with non-specific symptoms and raised CA125 or abnormal ultrasound results (or both) who had been referred via rapid access, elective clinics, or emergency presentations from 23 hospitals in the UK. Patients with normal CA125 and simple ovarian cysts of smaller than 5 cm in diameter, active non-ovarian malignancy, or previous ovarian malignancy, or those who were pregnant or declined a transvaginal scan, were ineligible. In this analysis, only postmenopausal participants were included. Participants completed a symptom questionnaire, gave a blood sample, and had transabdominal and transvaginal ultrasounds performed by International Ovarian Tumour Analysis consortium (IOTA)-certified sonographers. Index tests were Risk of Malignancy 1 (RMI1) at a threshold of 200, Risk of Malignancy Algorithm (ROMA) at multiple thresholds, IOTA Assessment of Different Neoplasias in the Adnexa (ADNEX) at thresholds of 3% and 10%, IOTA SRRisk model at thresholds of 3% and 10%, IOTA Simple Rules (malignant vs benign, or inconclusive), and CA125 at 35 IU/mL. In a post-hoc analysis, the Ovarian Adnexal and Reporting Data System (ORADS) at 10% was derived from IOTA ultrasound variables using established methods since ORADS was described after completion of recruitment. Index tests were conducted by study staff masked to the results of the reference standard. The comparator was RMI1 at the 250 threshold (the current UK National Health Service standard of care). The reference standard was surgical or biopsy tissue histology or cytology within 3 months, or a self-reported diagnosis of ovarian cancer at 12 month follow-up. The primary outcome was diagnostic accuracy at predicting primary invasive ovarian cancer versus benign or normal histology, assessed by analysing the sensitivity, specificity, C-index, area under receiver operating characteristic curve, positive and negative predictive values, and calibration plots in participants with conclusive reference standard results and available index test data. This study is registered with the International Standard Randomised Controlled Trial Number registry (ISRCTN17160843). Findings: Between July 13, 2015, and Nov 30, 2018, 1242 postmenopausal patients were recruited, of whom 215 (17%) had primary ovarian cancer. 166 participants had missing, inconclusive, or other reference standard results; therefore, data from a maximum of 1076 participants were used to assess the index tests for the primary outcome. Compared with RMI1 at 250 (sensitivity 82.9% [95%] CI 76·7 to 88·0], specificity 87·4% [84·9 to 89·6]), IOTA ADNEX at 10% was more sensitive (difference of -13.9% [-20.2 to -7.6], p<0.0001) but less specific (difference of 28.5% [24.7 to 32·3], p<0·0001). ROMA at 29·9 had similar sensitivity (difference of -3.6% [-9.1 to 1.9], p=0·24) but lower specificity (difference of 5·2% [2·5 to 8·0], p=0·0001). RMI1 at 200 had similar sensitivity (difference of -2·1% [-4·7 to 0·5], p=0·13) but lower specificity (difference of 3.0% [1.7 to 4.3], p<0.0001). IOTA SRRisk model at 10% had similar sensitivity (difference of -4.3% [-11.0 to -2.3], p=0.23) but lower specificity (difference of 16.2% [12.6 to 19.8]. p<0.0001). IOTA Simple Rules had similar sensitivity (difference of -1.6% [-9.3 to 6.2], p=0.82) and specificity (difference of -2.2% [-5.1 to 0.6], p=0.14). CA125 at 35 IU/mL had similar sensitivity (difference of -2.1% [-6.6 to 2.3], p=0.42) but higher specificity (difference of 6.7% [4.3 to 9.1], p<0.0001). In a post-hoc analysis, when compared with RMI1 at 250, ORADS achieved similar sensitivity (difference of -2·1%, 95% CI -8·6 to 4·3, p=0·60) and lower specificity (difference of 10·2%, 95% CI 6·8 to 13·6, p<0·0001). Interpretation: In view of its higher sensitivity than RMI1 at 250, despite some loss in specificity, we recommend that IOTA ADNEX at 10% should be considered as the new standard-of-care diagnostic in ovarian cancer for postmenopausal patients.

#### 18. Dimensions of posttraumatic stress disorder and menopause-related health in midlife women veterans.

Authors: Thomas J.L.; Blanken A.E.; Huang A.J.; Maguen S.; Gibson C.J. and Sumner, J. A.

**Publication Date: 2024** 

**Journal:** Menopause 31(10), pp. 842–852

**Abstract:** Objective Posttraumatic stress disorder (PTSD) has been linked with menopause symptoms (eg. vasomotor, urinary) and their seguelae (eg. sexual difficulties). However, PTSD is a heterogeneous disorder, and less is known about which aspects may be most associated with menopause-related health. Methods Using confirmatory factor analyses, we evaluated five structural models of PTSD symptoms in 208 predominately postmenopausal women veterans (aged 45-64 years). We investigated associations between PTSD-operationalized as a probable diagnosis and symptom dimensions of the best-fitting model-and common menopause-related health concerns, including (1) vasomotor, urinary, and vaginal symptoms; (2) vasomotor symptom interference; and (3) sexual functioning. Results A six-factor anhedonia model-comprising re-experiencing, avoidance, negative affect, anhedonia, anxious arousal, and dysphoric arousal-provided optimal fit. Both probable PTSD and greater symptoms across all dimensions were linked with presence of urinary and vasomotor, but not vaginal, symptoms. Comparing dimensions revealed that negative affect and dysphoric arousal were particularly associated with urinary symptoms, whereas dysphoric arousal was the factor most strongly related to vasomotor symptom interference. Associations between PTSD and sexual dysfunction were mixed; whereas there was no relation with probable diagnosis, all dimensions were linked with adverse sexual seguelae. Conclusions PTSDconsidered categorically and dimensionally-was relevant to menopause-related health in midlife women veterans. Further, symptoms of negative affect and dysphoric arousal were particularly related to urinary and vasomotor symptoms. These specific symptoms may drive associations between PTSD and these aspects of menopause-related health. Clinical interventions targeting these symptoms may promote midlife women's health.

### 19. A Review of the Risk Factors Associated with Endometrial Hyperplasia During Perimenopause.

Authors: Wang L.; Wei W. and Cai, M.

**Publication Date: 2024** 

**Journal:** International Journal of Women's Health 16, pp. 1475–1482

**Abstract:** Background: Endometrial hyperplasia, characterized by excessive growth leading to endometrial thickening, is commonly observed in the premenopausal period. Its prevalence in postmenopausal women is approximately 15%, peaking between ages 50 and 60. This condition often manifests as abnormal uterine bleeding and can progress to malignancy, with varying risks depending on the type of hyperplasia. Purpose: This study aims to investigate the factors influencing endometrial thickness during the perimenopausal period and raise awareness among healthcare professionals about the importance of evaluating and caring for

individuals with endometrial hyperplasia. Methods: Studies examining the association between various factors such as diabetes mellitus, hypertension, age, estrogen replacement therapy, anovulatory disorders, smoking, medications, genetic factors, and endocrine-related proteins and the development of endometrial hyperplasia were reviewed. The literature search encompassed relevant databases, including PubMed, Scopus, and Web of Science. Results: Research findings indicate significant associations between changes in gene expression of several factors and the development of endometrial hyperplasia. Notably, the risk of progression to cancer varies between non-atypical and atypical hyperplasia cases. Factors such as diabetes mellitus, hypertension, age, estrogen replacement therapy, anovulatory disorders, smoking, medications, Lynch syndrome, tamoxifen use, and alterations in gene expression of TNF-α, EGF, IGF-1, IGF-1R, and PTEN have been implicated in the pathogenesis of endometrial hyperplasia. Conclusion: This study underscores the importance of understanding the factors influencing endometrial thickness during the perimenopausal period. It emphasizes the pivotal role of healthcare professionals in evaluating and caring for individuals with this condition.

#### 20. Public awareness and provider counseling regarding postmenopausal bleeding as a symptom of endometrial cancer.

**Authors:** Wise M.K.; Schefter A.M.; Brill J.; Bharucha K.A.; Tessier K.M.; Terrell C.A. and Erickson, B. K.

**Publication Date: 2024** 

**Journal:** Menopause 31(10), pp. 905–910

Abstract: Objectives Our study aims to understand public knowledge of postmenopausal bleeding as an endometrial cancer symptom and how past provider counseling on postmenopausal bleeding affects knowledge and care-seeking behaviors related to postmenopausal bleeding. Methods This was a cross-sectional survey study of people assigned female at birth. Study participants were recruited at a university research facility located at the Minnesota State Fair in September 2021. Participants answered questions about demographics, endometrial cancer knowledge, whether they had received counseling about postmenopausal bleeding, and whether and when they would present for care after experiencing postmenopausal bleeding. Results Six hundred forty-eight surveys were completed and included in analyses. Sixty-Three percent of participants identified postmenopausal bleeding as a symptom of endometrial cancer. Those who correctly selected this symptom were more likely to be born in the United States, have a college education or higher, and have private insurance. Of the 145 postmenopausal participants, 46.5% reported that their provider counseled them on postmenopausal bleeding. Fifty-nine percent of the postmenopausal participants reported that they would tell their provider if they had postmenopausal bleeding after only one episode. Conclusions There is a need for increased recognition of postmenopausal bleeding and provider counseling on postmenopausal bleeding, and educational interventions should focus on public and provider awareness of endometrial cancer risks and symptoms.

#### In the News:

#### White women most likely to get HRT prescriptions in England, study finds

The Guardian

21 October 2024

"Academics at the University of Oxford examined HRT prescriptions issued in England to 1,978,348 women aged 40 to 60 over a 10-year period. Findings presented at the World Congress on Menopause in Melbourne on Monday revealed that between 2013 and 2023, almost six times as many white women were prescribed HRT than black women, and more than twice as many women in affluent areas were offered HRT than those living in socially deprived areas."

https://www.theguardian.com/society/2024/oct/21/white-women-hrt-prescriptions-study-england

## Women's health campaigner Mariella Frostrup appointed as Government Menopause Employment Ambassador

Gov.uk

18 October 2024

"Journalist and women's equality campaigner, Mariella Frostrup, has been appointed as the government's new Menopause Employment Ambassador.

The voluntary role will see Mariella working closely with employers across the country to improve workplace support for women experiencing the menopause, raise awareness of the symptoms and champion the economic contributions of women. A key focus will be helping women going through the menopause stay in work and progress in their careers."

https://www.gov.uk/government/news/womens-health-campaigner-mariella-frostrup-appointed-as-government-menopause-employment-ambassador

#### Latest Menopause Exchange Newsletter

Issue 101 Summer 2024

- Anxiety and the menopause
- HRT types and forms
- Thyroid disease and the menopause
- New Pharmacy First scheme

Anyone with an interest in the menopause, midlife and post-menopausal health can receive The Menopause Exchange quarterly newsletters for FREE: www.menopause-exchange.co.uk to subscribe

#### Sources used:

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

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