

Women's Health RESEARCH REVIEW™



Making Education Easy

Issue 31 – 2021

In this issue:

- What people understand about the mechanism of action of ECPs
- The genitourinary syndrome of menopause
- Relationship of parity and prior caesarean delivery to IUS expulsion
- Hormone therapy for nocturia in postmenopausal women
- Prevalence of contraindications to progestin-only contraceptive pills
- Early and surgical menopause associated with higher CVD risk
- BMI influences the risk of POP surgery failure
- Surgical outcomes of hysterectomy according to surgery type
- Prevalence and impact of dysmenorrhoea among nursing students in Sri Lanka

Abbreviations used in this issue

BMI = body mass index
CVD = cardiovascular disease
ECP = emergency contraceptive pill
IUS = intrauterine system
POP = pelvic organ prolapse
UKMEC = UK Medical Eligibility Criteria
UPSI = unprotected sexual intercourse

CLICK HERE

to read previous issues of
Women's Health Research Review



Welcome to the latest issue of Women's Health Research Review.

In this issue, an interesting social media survey in the US discovers how much (or how little) the general public understands about the mechanism of action of ECPs, a pilot study assesses the use of systemic hormone therapy as a possible treatment for nocturia in postmenopausal women, and a US study determines the prevalence of contraindications to progestin-only pills in women of reproductive age to evaluate the safety of over-the-counter provision. Also in this issue, a Danish cohort study finds that BMI influences the risk of reoperation after surgery for pelvic organ prolapse, and a retrospective US study confirms the benefits of minimally invasive hysterectomies.

We hope you find these and the other selected studies interesting, and welcome any feedback you may have.

Kind regards,

Associate Professor Helen Roberts
helenroberts@researchreview.co.nz

Dr Anil Sharma
anilsharma@researchreview.co.nz

"It prevents a fertilized egg from attaching ... and causes a miscarriage of the baby": A qualitative assessment of how people understand the mechanism of action of emergency contraceptive pills

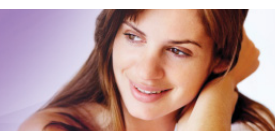
Authors: Cleland K et al.

Summary: This US study used a social media survey to evaluate what members of the general public understand about the mechanism of action of ECPs. 533 out of 1443 respondents described a mechanism of action for ECPs. Nearly half of them believed that ECPs prevent pregnancy before fertilisation occurs, but a large percentage (>60%) described a mechanism related to preventing implantation of a fertilised egg, and 9% described a post-implantation mechanism that would be considered abortion by mainstream medical standards.

Comment (HR): The participants in this study were asked to answer the question "To the best of your ability, please describe what you know about the morning-after pill". There were 1443 participants but the final sample for analysis was only 533. Despite the question, 500 did not mention how the ECP worked and one can only presume they didn't know. For those who answered, the 3 categories under which they assigned the 10 subthemes were: (1) pre-fertilisation; (2) post-fertilisation/pre-implantation; and (3) post-implantation. The post-implantation category included 9.0% of responses. Medically, pregnancy begins after the successful implantation in the uterus of an embryo. One of the men said that ECP "induces a menstrual period and terminates a possible pregnancy right after possible fertilization". Another respondent, this time female, equated a fertilised egg with a baby: "it prevents a fertilized egg from attaching to the uterine lining and causes a miscarriage of the baby". As the study says, confusion about ECPs may be perpetuated by the FDA-approved label which describes a mechanism that is out of step with current research and has been removed from labels in Europe. It is hard to believe but this label for ECPs says "may prevent ... attachment of a fertilized egg to the uterus (implantation)" as a possible mechanism. It can take time for evidence-based information to get through to data sheets and pill package inserts. It was only a few years ago that breastfeeding was removed as a contraindication to ECP use from the Medsafe document. Indeed it was only this year that finally the Medsafe document permitted Jadelle® insertion immediately after delivery for breastfeeding women despite good evidence that it does not affect breast milk. What does our Medsafe document say about the mode of action of the ECP? It correctly says "If you are already pregnant, Postinor®-1 cannot terminate pregnancy, because Postinor®-1 is not an abortion pill". However it also says Postinor®-1 is thought to work by stopping your ovaries from releasing an egg and preventing sperm from fertilising any egg you may have already released. The latter statement is incorrect and the former needs clarification as it does not necessarily stop ovulation for the whole cycle. The best place to get evidence-based information is the [Faculty of Sexual and Reproductive Health](#). Their document on emergency contraception says "levonorgestrel emergency contraception (LNG-EC) inhibits ovulation, delaying or preventing follicular rupture and causing luteal dysfunction. If taken prior to the start of the LH surge, LNG inhibits ovulation for the next 5 days, until sperm from the UPSI for which it was taken are no longer viable. In the late follicular phase, however, LNG-EC becomes ineffective. Although post-ovulation effects of LNG-EC have been suggested, 34 subsequent studies have not shown a significant EC effect of LNG-EC administered after ovulation. After taking LNG-EC, women who ovulate later in the cycle are at risk of pregnancy from further UPSI. It is essential that women are made aware of this risk and advised regarding ongoing contraception".

Reference: *Contraception* 2021;103(6):408-13

[Abstract](#)



The genitourinary syndrome of menopause

Authors: Phillips NA & Bachmann GAM

Summary: Genitourinary syndrome of menopause (GSM) may affect up to 50% of postmenopausal women. Symptoms include vulvovaginal dryness, burning or irritation, dyspareunia, urinary symptoms of urgency, dysuria, or recurrent urinary tract infection, and are unlikely to resolve spontaneously. Effective treatments include moisturisers and lubricants, local hormonal therapy with oestrogen or dehydroepiandrosterone (DHEA), and oral selective oestrogen receptor agonists.

Comment (HR): This invited review looks at the genitourinary symptoms of menopause now often referred to as the GSM. GSM may include one or any combination of genital symptoms such as vulvovaginal dryness, burning or irritation, dyspareunia, or urinary symptoms of urgency, dysuria or recurrent urinary tract infection. Up to 50% of postmenopausal women may report symptoms of GSM, and despite GSM being associated with menopause, up to 15% of women may report symptoms during premenopause. When reported in premenopausal women, GSM is usually due to a temporary hypoestrogenic state. Low circulating levels of oestrogens affect both the lower urinary tract and vaginal and vestibule as they are embryologically connected. The actual prevalence is thought to be higher than noted due to under-reporting. This may be due to factors such as the women's perceptions that the symptoms are normal and they do not think of these symptoms as a medical problem or related to menopause. In addition, they may not feel comfortable discussing GSM with a health care provider and are often not being asked by their clinician. GSM is a clinical diagnosis, based on history and physical examination as well as taking a sexual history. Physical examination findings do not always correlate with presence or severity of symptoms. A response of not being sexually active should prompt further inquiry, as up to 58% of women report they avoid intimacy based on symptoms. Vaginal lubricants and moisturisers can be offered as first-line therapy, especially for women with mild symptoms of vaginal dryness or dyspareunia. Moisturisers are used regularly while lubricants are intended for use with sexual or other vaginal activity. Women should be advised that trial and error in choosing products may be necessary, and that a "wash out" period between different products will offer the most clarity in result. The review goes through FDA approved treatments for GSM including oestrogen creams, an oestrogen vaginal ring, a DHEA vaginal preparation (Prasterone®) and an oral selective oestrogen receptor modulator (Ospemifene®). Neither Prasterone® nor Ospemifene® is available in NZ. Locally applied oestrogens, at the recommended dosage, have few side effects and little systemic absorption. The package labelling for locally applied oestrogen products contains the same contraindications and risks as systemic oestrogen, including an increased risk of cardiovascular disease, breast, and endometrial cancer and dementia. This labelling is not evidence-based and risks are believed to be minimal. Reassuringly, a prospective cohort study using data from the Women's Health Initiative observational study showed no increased risk of stroke, invasive breast cancer, colorectal cancer, endometrial cancer, or pulmonary embolism/deep vein thrombosis in users versus nonusers of vaginal oestrogens. Progestogen replacement is also not recommended. Women with a history of breast cancer should be offered non-hormone methods as first-line treatment of GSM such as Replens®. Women with severe or refractory cases can be offered locally applied oestrogen treatment after an informed discussion of the risks and benefits, ideally in consultation with the patient's oncologist. This approach was recommended by the American College of Obstetricians and Gynecologists (ACOG), as noted in the 2016 ACOG-issued Committee Opinion which stated that "data do not show an increased risk of cancer recurrence among women currently undergoing treatment for breast cancer or those with a personal history of breast cancer who use vaginal estrogen to relieve urogenital symptoms". Tamoxifen has some oestrogenic action in the vagina compared to aromatase inhibitors so women may have less vaginal dryness when taking it. With aromatase inhibitors, absolute circulating oestradiol levels are low and vaginal oestrogen may possibly cause a relatively greater increase in serum oestrogen. Replens®, a vaginal moisturiser available over the counter, should be tried first. If oestrogen is to be used then try Ovestin® (oestriol) rather than Vagifem® (oestradiol) as this will cause lower systemic levels of oestradiol. Also many women get relief from using only half an applicatorful.

Reference: *Menopause* 2021;28(5):579-88

[Abstract](#)

Relationship of parity and prior cesarean delivery to levonorgestrel 52 mg intrauterine system expulsion over 6 years

Authors: Gilliam ML et al.

Summary: This analysis of the ACCESS IUS study investigated the relationship between parity, prior route of delivery, and expulsion of a levonorgestrel 52mg IUS during the first 72 months of use. Of 1714 women with IUS placement, 65 (3.8%) experienced IUS expulsion within 72 months (50 within the first 12 months). Expulsion rates were lower in nulliparous or parous women who had had a caesarean delivery (2.2% and 3.1%, respectively), compared with parous women who had only had vaginal deliveries (7.2%; $p < 0.001$). Multivariable regression analysis showed that obesity, parity, and non-white race predicted expulsion. Among parous women, the odds of expulsion were increased by obesity and decreased by a history of caesarean delivery.

Comment (HR): This study, ACCESS IUS, is a US-based, multicentre phase 3 open-label contraceptive clinical trial. Actually it has already led to approval of the Mirena® IUS for 6 years and is at present following women for up to 10 years of use. Women were recruited from 29 clinical sites and were nulliparous or parous, aged 16–45 years. Follow-up visits occurred 3 times in the first 6 months and then every 6 months thereafter, with phone calls at the 3-month interval between visits. At each visit, the investigator performed a digital or speculum examination to confirm presence of the IUS thread. The investigator performed a transvaginal ultrasound examination annually for subjects with missing threads or when clinically indicated (e.g. increased bleeding, cramping) to evaluate for possible expulsion. Whereas expulsion occurred in about 3% of users at 1 year and 4% by 6 years, the rate varied most significantly by obesity status, type of delivery (if any), and prior pregnancy. Nulliparous women had low expulsion rates of about 2% at 1 year and 3% at 6 years. Similarly, those with any prior caesarean deliveries had rates of about 3% at 1 year and no expulsions thereafter. Expulsions appear to occur most frequently in women who have experienced only vaginal deliveries (5% at 1 year and 7% at 6 years). It appears that the type of delivery and not just parity is the risk factor for expulsion. The authors do not give any explanation of why this may be true. None of these IUS were inserted immediately post placental delivery and we do know that expulsion is lower when the device is placed at caesarean delivery compared to shortly after vaginal delivery. Obesity independently increased the odds of expulsion more than 2-fold in the total population and in the subanalysis of just parous women; the odds of expulsion increase with increasing BMI and the authors comment that this may be related to issues at placement. Other contemporary studies have included significantly more nulliparous women and demonstrate that expulsion occurs more frequently in parous than nulliparous women. A NZ study published in 2003 found that perforations were more likely when the inserting clinician did fewer procedures and it is recommended that inserters should aim for 1 insertion per month. It is possible that the skill of the operator may also influence good fundal placement of the IUS. The [Faculty of Sexual and Reproductive Health](#) document tells us that the risk of expulsion is 1 in 20 and is most common in the first year of use, especially in the first 3 months.

Reference: *Contraception* 2021;103(6):444-9

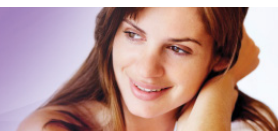
[Abstract](#)

New Zealand Research Review subscribers can claim CPD/CME points for time spent reading our reviews from a wide range of local medical and nursing colleges. Find out more on our [CPD page](#).

Independent commentary provided by Honorary Associate
Professor Helen Roberts MB, MPH, FACHSHM



After my medical degree at Trinity College Dublin, I worked at the Rotunda Hospital and then King's College Hospital in London. In 1983 I came to New Zealand and joined Family Planning, becoming the Medical Director and National Medical Spokesperson from 1988-1992. In 1991 I completed the MPH at Yale University in New Haven and on my return took up an academic position in the Department of Obstetrics and Gynaecology, University of Auckland. At present I am Associate Professor Women's Health at the University of Auckland and am involved with both undergraduate and postgraduate medical education in O&G. My clinical and research interests and publications have been mainly in the areas of contraception, menopause and HPV vaccine.



Jaydess. No more missed-pill moments.

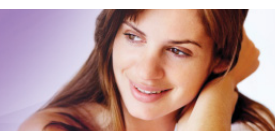
Jaydess is the low hormone* IUS providing up to three years of highly effective* contraception¹. Every patient forgets things, but at least with Jaydess birth control won't be one of them.

*Average levonorgestrel dissolution rate 6µg/24 hours over three years compared to Mirena 15µg/24 hours over five years^{1,2}
¹Three-year cumulative contraceptive failure rate of <1%



References: 1. Jaydess Data Sheet, 10 September 2020. 2. Mirena Data Sheet, 10 September 2020.

JAYDESS® (levonorgestrel). JAYDESS is used for contraception. Prescription Medicine. 13.5 mg intrauterine delivery system containing levonorgestrel. **INDICATIONS:** Contraception for up to 3 years. **DOSAGE AND ADMINISTRATION:** Insert into the uterine cavity. Up to 3 year in-situ life. Refer to Data Sheet for instructions on insertion and removal. **CONTRAINDICATIONS:** Pregnancy; acute or recurrent pelvic inflammatory disease or conditions associated with increased risk for pelvic infections; lower genital tract infection; postpartum endometritis or infected abortion during the past three months; cervicitis; cervical intraepithelial neoplasia; uterine or cervical malignancy; confirmed or suspected hormone dependent tumours including breast cancer; abnormal uterine bleeding of unknown etiology; congenital or acquired uterine anomaly including fibroids which would interfere with insertion and/or retention of the intrauterine system (i.e. if they distort the uterine cavity); acute liver disease or liver tumour; hypersensitivity to the active substance or to any of the excipients. **PRECAUTIONS:** Use with caution after specialist consultation cerebral ischemia, exceptionally severe headache, jaundice, marked increase in blood pressure, severe arterial disease, acute venous thromboembolism. Nulliparous women; breast cancer; endometrial polyps, hyperplasia or cancer; congenital or valvular heart disease and are at risk of infective endocarditis; diabetes; infrequent bleeding and/or amenorrhoea; pelvic infections; expulsion; perforation; ectopic pregnancy; sexually transmitted infections; lost threads; ovarian cysts/enlarged ovarian follicles. **INTERACTIONS:** Phenytoin; barbiturates; primidone; carbamazepine; rifampicin; oxcarbazepine; topiramate; felbamate; griseofulvin; products containing St. John's wort; HIV/HCV protease inhibitors and non-nucleoside reverse transcriptase inhibitors; strong and moderate CYP3A4 inhibitors such as azole antifungals (e.g. fluconazole, itraconazole, ketoconazole, voriconazole), verapamil, macrolides (e.g. clarithromycin, erythromycin), diltiazem, grapefruit juice; magnetic resonance imaging. **ADVERSE EFFECTS:** headache, abdominal/pelvic pain, acne/seborrhoea, bleeding changes (including increased and decreased menstrual bleeding, spotting, oligomenorrhoea and amenorrhoea), ovarian cyst, vulvovaginitis, depressed mood/depression, migraine, nausea, alopecia, upper genital tract infection, dysmenorrhoea, breast pain/discomfort, device expulsion (complete and partial), genital discharge. Uterine perforation, ectopic pregnancy, hypersensitivity, and sepsis have also been reported. For other events refer to full Data Sheet. Based on DS dated 10 September 2020. JAYDESS is fully funded – no special authority. Before prescribing, please review full Data Sheet for further information on the risks and benefits. Full Data Sheet is available from <https://www.medsafe.govt.nz/profs/Datasheet/j/jaydessIVD.pdf> or Bayer New Zealand Limited, PO Box 2825, Shortland Street, Auckland 1140, telephone 0800 233 988. Bayer New Zealand Ltd, 72-74 Taharoto Road, Takapuna, Auckland 0622. PP-JAY-NZ-0015-1. TAPS NA 12764. March 2020. Remade Agency BY0001.



Hormone therapy as a possible solution for postmenopausal women with nocturia

Authors: Pauwaert K et al.

Summary: This pilot trial investigated the impact of different hormonal treatment options on nocturia in postmenopausal women. 245 women were divided into 4 treatment groups and received oestrogen + progesterone, oestrogen only (patients with a prior hysterectomy), tissue-selective oestrogen complex, or no treatment. Nocturia was assessed using standardised questionnaires before and after treatment. The prevalence of nocturia (at least twice a night) decreased from 27.7% (59/213) to 16.4% (35/213) after hormonal treatment. A significant reduction in nocturnal voiding frequency was observed in patients treated with oestrogen + progesterone ($p=0.018$) and tissue-selective oestrogen complex ($p=0.018$). This was due mainly to an improvement in sleep disorders.

Comment (HR): The [editorial](#) in the same issue of the journal as this paper tells us that the prevalence of nocturia in menopausal women is 28–77% and that treatment options are minimal for this bothersome condition. Nocturia is thought to be a separate condition to other lower urinary tract symptoms and has a multifactorial aetiology. This prospective observational pilot study found that systemic combined hormone therapy led to a significant reduction in nocturia prevalence with a significant improvement in bother for those women who usually had 2 or more nocturnal voids. A difference in nocturnal frequency for oestrogen alone was not found, however a reduction in the number of participants reporting more than 2 nocturnal voids was observed. Despite the variable effect on nocturnal frequency, a clear impact on bother linked with nocturia was observed in women treated with oestrogen + progesterone and oestrogen alone. This is an interesting finding as we already know from a recent Cochrane Review that for urinary symptoms such as incontinence, systemic hormone therapy makes it worse but vaginal oestrogen is beneficial. However a systematic review observing the effect of vaginal oestrogen in postmenopausal women suggested very low quality of evidence for any benefit in the treatment of nocturia. The authors of the study have explained the improvement was likely due to a benefit of better quality of sleep with hormone therapy. The editorial points out that this study did not use a voiding diary and that randomised clinical trials with a thorough understanding of the complex pathophysiology of nocturia are needed.

Reference: *Menopause* 2021;28(5):502-10

[Abstract](#)

RACP MyCPD Program participants can claim one credit per hour (maximum of 60 credits per year) for reading and evaluating Research Reviews.

FOR MORE INFORMATION [CLICK HERE](#)

Long Acting Reversible Contraception -- E-Learning Module

This module, specifically designed for busy GPs and nurses, is based on the Research Review Educational Series - Long Acting Contraception, with expert commentary by Honorary Associate Professor Helen Roberts.

This review summarises the benefits, as well as any potential management considerations associated with the use of the LARCs currently available.

[READ THE LARC ARTICLE](#)



GPs:
START MODULE



NURSES:
START MODULE

Prevalence of contraindications to progestin-only contraceptive pills in a multi-institution patient database

Authors: Dutton C et al.

Summary: This study analysed a multi-institution US database (2009–2015) to investigate the prevalence of contraindications to progestin-only contraceptive pills in women of reproductive age. Among 813,888 females seeking preventive care, only 4.36% had a condition that was considered to be a potential or unacceptable risk for initiation of a progestin-only contraceptive pill. Among 71,216 women seeking both preventive care and contraceptive services, only 2.29% had a condition that was considered to be a potential or unacceptable risk for initiation of a progestin-only pill.

Comment (HR): The literature contains overseas models of care that support pharmacy delivery of the combined contraceptive pill. In NZ, there has already been an application for a proposed reclassification from prescription medicine to restricted medicine which was partially successful. Registered pharmacists, who have completed the training, are now able to give repeat prescriptions of the pill. Prior research demonstrates that individuals can accurately self-identify the contraindications to use of the combined pill. There are fewer contraindications to the progestin-only pill, making it potentially possible for supply as an over-the-counter medication, even more accessible than a restricted medicine. This study looked at 813,888 females seeking preventive care. Of these, only 4.36% had a condition associated with a potential or unacceptable risk for initiation of a progestin-only pill (i.e. UKMEC category 3 or 4). Out of the overall group, 71,216 women were also seeking contraceptive services and even fewer of these women (2.29%) were UKMEC 3 or 4. Current breast cancer, the only condition classified as an unacceptable risk for initiation (UKMEC 4) was listed as a diagnosis for only 0.57% in this group. The study used Centre for Disease Control classifications for contraceptive use, whereas in NZ we use UKMEC. UKMEC 3 is "a condition where the theoretical or proven risks usually outweigh the advantages of using the method". Previous ischaemic heart disease and stroke are UKMEC 2 but if a woman develops either of these conditions while on a progestin-only contraceptive pill then continuation of the method becomes a UKMEC 3. UKMEC 4 is a condition which represents an unacceptable risk if the method is used. As the study says, previous breast cancer is the only category 4 and only 0.57% of the women seeking contraception in this study had this in their medical history. The authors' conclusion was that "the prevalence of contraindications to POP [progestin-only pill] among reproductive age women is low. This finding supports the relative safety of an over the counter progestin-only contraceptive pill". For the moment, though, if a woman wants to start a combined pill immediately and has a condition which you feel needs further consultation then the progestin-only pill is a very useful solution. Pill teaching with the progestin-only pill is somewhat more restrictive as Noriday® needs to be taken within a 3-hour leeway and Cerazette® within a 12-hour leeway.

Reference: *Contraception* 2021;103(5):367-70

[Abstract](#)

Independent Content: The selection of articles and writing of summaries and commentary in this publication is completely independent of the advertisers/sponsors and their products.

Privacy Policy: Research Review will record your email details on a secure database and will not release them to anyone without your prior approval. Research Review and you have the right to inspect, update or delete your details at any time.

Disclaimer: This publication is not intended as a replacement for regular medical education but to assist in the process. The reviews are a summarised interpretation of the published study and reflect the opinion of the writer rather than those of the research group or scientific journal. It is suggested readers review the full trial data before forming a final conclusion on its merits.

Research Review publications are intended for New Zealand health professionals.



2021 ANNUAL SCIENTIFIC MEETING • NZ

RANZCOG

Campaigning for Equity in Women's Health
He Kakari Taurite mo te Oranga Wāhine



FAMILY PLANNING NEWS CORNER



Expanded contraceptive practice for doctors, nurses and midwives

Four National Contraception Training Service courses available.

- Contraceptive Counselling
- Intrauterine Contraception (theory)
- Contraceptive Implants (theory)
- Trainer and Assessor

Practical training assessment is also available. Conditions apply. The National Contraception Training Service is aligned with the New Zealand Aotearoa's Guidance on Contraception and the National LARC Training Principles and Standards.



Course information and registration at

www.familyplanning.org.nz/courses

Early and surgical menopause associated with higher Framingham Risk Scores for cardiovascular disease in the Canadian Longitudinal Study on Aging

Authors: Price MA et al.

Summary: This study assessed the association between menopausal type and timing and the 10-year Framingham Risk Score (FRS) for CVD in women from the Canadian Longitudinal Study on Aging. 10,090 women who were menopausal (8200 had natural menopause and 1890 had surgical menopause) at the time of recruitment and had no prior CVD were included. In a multivariable model, surgical menopause (hysterectomy with or without oophorectomy prior to natural menopause) was associated with a higher mean FRS than natural menopause (CVD risk, 12.4% vs 10.8%; $p < 0.001$). Women who had natural menopause aged <40 years, 40–44 years, or 45–49 years had a higher CVD risk (12.2%, 11.4%, and 10.6%, respectively) than women who had natural menopause aged 50–54 years (CVD risk, 10.2%; $p < 0.001$).

Comment (HR): Conventional wisdom is that early menopause causes CVD and that hormone therapy minimises this risk. This study and the accompanying [editorial](#) give us a new perspective. The study included women aged 45–85 years from the Canadian Longitudinal Study on Aging who were menopausal at the time of recruitment and had no prior CVD. Surgical menopause was associated with a higher mean Framingham Risk Score than natural menopause. Compared with women with age at natural menopause from 50–54 years, natural menopause before age 40, 40–44, or 45–49 years had a higher CVD risk. The authors concluded that their study supports an association between menopausal type and timing on CVD risk prediction and highlights the need to be judicious about surgical menopause. The association was attenuated in smokers and obese women, suggesting that smoking and obesity independently of age at natural menopause had a greater impact on this association. Interestingly, hormone therapy did not modify the association between premature ovarian insufficiency (POI) and a higher FRS. That is, a higher FRS persisted in women with POI compared with age of natural menopause 50–54 years independently of hormone therapy use. This last point is interesting. The editorial points out that although several international expert bodies advise use of menopausal hormone therapy until the average age at natural menopause (50 years), the evidence supporting this recommendation is limited. The editorial agrees that additional measures for prevention of CVD may be indicated in these women, but evidence is urgently needed about what form these interventions might take. Spontaneous early menopause may be a marker of adverse long-term health but it is largely unavoidable. Cigarette smoking is one of the few modifiable factors associated with earlier age at menopause and is also a well-established risk factor for CVD. Younger women should be aware that smoking may increase their risk of early menopause in the short-term and cardiovascular risk in the longer term. The Framingham authors have been careful to discuss that there have been methodological gaps in assessing the direction of causality between early menopause and CVD and that some argue that the relationship may be due to reverse causality. That is, women with a CVD event before age 35 are more likely to have an early menopause (<45 years). It is also possible that women who undergo surgical menopause may have other concurrent CVD risk factors including hypertension, diabetes, high cholesterol, and obesity. The editorial concludes that the Framingham authors were unable to demonstrate any cardiovascular benefits of menopausal hormone therapy use in their study, and established risk factors for CVD such as smoking and obesity were of greater significance than the use of hormones. "For women experiencing early and surgical menopause, there is an urgent need for information about whether menopausal hormone therapy results in better cardiovascular outcomes in this population."

Reference: *Menopause* 2021;28(5):484-90

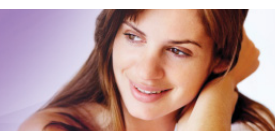
[Abstract](#)



This Research Review has been endorsed by The Royal New Zealand College of General Practitioners (RNZCGP) and has been approved for up to 1 CME credit for the General Practice Educational Programme (GPEP) and Continuing Professional Development (CPD) purposes. You can record your CME credits in your [RNZCGP Dashboard](#)



Time spent reading this publication has been approved for CNE by The College of Nurses Aotearoa (NZ) for RNs and NPs. For more information on how to claim CNE hours please [CLICK HERE](#).



Body mass index influences the risk of reoperation after first-time surgery for pelvic organ prolapse. A Danish cohort study, 2010-2016

Authors: Weltz V et al.

Summary: This Danish cohort study evaluated the impact of BMI on the risk of reoperation for POP up to 5 years after first-time surgery. 22,624 women who had first-time POP surgery in 2010–2016 were included; most of them (76.6%) had single-compartment repair. 1- and 5-year reoperation rates within the same compartment were 2.6% and 6.1%, respectively, for women with BMI <25, and 3.7% and 11.2%, respectively, for women with BMI >35. The 1- and 5-year reoperation rates in an adjacent compartment were 0.6% and 1.6%, respectively, for women with BMI <25, and 1.0% and 4.4%, respectively, for women with BMI >35.

Comment (AS): This study had robust data as the Danish National Registry collects this for all operations (national public health service) and relates to over 28,000 procedures, the vast majority being traditional vaginal procedures (anterior and/or posterior and/or apical repair). The chances of needing another procedure (as a robust measure of failure of the primary one) in the same prolapse compartment within 1 year was 2.6% if BMI was less than 25. Within 5 years it was 6.1%. If the BMI was over 35, the respective figures were 3.7% and 11.2%. The authors also looked at the effects of new prolapse in an alternate compartment. The main findings were that a raised BMI has a significant effect on the risk of re-operation. In 2016, 39% women over the age of 18 years worldwide were classified as obese and the figures are rising. It is important that women with obesity have adequate counselling regarding recurrent prolapse and failed primary surgery.

Reference: *Int Urogynecol J* 2021;32(4):801-8
[Abstract](#)

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) Fellows may claim 1 PD point per hour in the 'Self-Education' component of any of the three domain for any self-educational O&G activities completed (including reading of relevant Research Reviews).



Research Review
New Zealand is
now on LinkedIn.

[FOLLOW US](#) TO KEEP UP TO DATE

Claim your CPD points
for reading
Research Reviews

FIND OUT MORE

Surgical outcomes of hysterectomy for endometriosis: Benefits of a minimally invasive approach

Authors: Mutter O et al.

Summary: This study used the National Surgical Quality Improvement Program (NSQIP) database to evaluate outcomes based on surgical approach in patients who underwent a hysterectomy for endometriosis. From 2016 to 2018, 3641 hysterectomies were performed for endometriosis. 86.0% were performed via a minimally invasive approach (79.2% via a laparoscopic and 6.8% via a vaginal approach). Women who underwent an abdominal hysterectomy had heavier uteri, lower parity, and were more likely to be African-American or obese than those who underwent a minimally invasive hysterectomy. The overall complication rate in women undergoing hysterectomy for endometriosis was 9.8%. Compared to abdominal approaches, minimally invasive hysterectomies had a lower rate of overall complications (8.5% vs 17.8%) including wound (2.7% vs 7.2%) and major (4.4% vs 8.8%) complications (all $p < 0.001$). Women who had a minimally invasive hysterectomy also had shorter operation time, shorter length of stay, and fewer readmissions (all $p < 0.001$).

Comment (AS): This retrospective US study again confirms the advantages of minimally invasive types of hysterectomies with regards to complications and recovery. This study specifically looked at hysterectomies that had been undertaken for endometriosis. The message was clear that the rate for all complications was half that of open operations (8.5% vs 17.8%) – and major complications also (4.4% vs 8.8%). Problems with the study included the retrospective nature and the lack of information about the stage of endometriosis which I believe would have added further clarity to complication rates (as endometriosis significantly increases these for hysterectomy). It is also not clear what other surgery was undertaken concurrently for pelvic endometriosis. The logic for undertaking 6.8% of the total surgeries vaginally is also baffling if the indication was for pelvic endometriosis.

Reference: *J Endometr Pelvic Pain Disord* 2021;13(2):83-8
[Abstract](#)

Prevalence of dysmenorrhea, its association with overall academic engagement, and management among nursing undergraduates at Peradeniya University, Sri Lanka

Authors: Alahakoon AMSS et al.

Summary: This cross-sectional study determined the prevalence and impact of dysmenorrhea among nursing students at Peradeniya University, Sri Lanka. 86 female nursing students who represented all 4 academic years completed a self-administered questionnaire. The prevalence of dysmenorrhea was found to be 97.7%; with many of the women (54.7%) suffering moderate pain. 32.6%, 33.7%, and 17.4% of respondents experienced slight, moderate, and heavy impairment of overall academic engagement during the period of dysmenorrhea. Pain level was positively correlated with extent of academic impairment ($p < 0.05$). The majority of respondents used a combination of both pharmacological and non-pharmacological pain relief.

Comment (AS): I found this study fascinating for the contrast with our own research and methods of management of dysmenorrhoea. It looked at prevalence of the problem, pain management techniques, efficacy of the same and effects on academic study. Whilst small in size (86 students, age 21–26 years, all nulligravid), 97.7% reported some dysmenorrhoea, 54.7% reported moderate and 29.1% severe dysmenorrhoea (numeric pain scale). Methods to combat the pain included over-the-counter analgesics and a large variety of non-pharmacological actions e.g. relaxation, warm showers, ginger beer, boiled coriander water and many more (64.3% used both types). Remarkably, around 75% of respondents were able to reduce or cure their dysmenorrhoea. Whilst the findings of the paper have to be viewed with caution given the significant differences between our populations, ongoing further research into alternative methods of management needs action. It is also very surprising that none of the students ended up having diagnosis and management of endometriosis. What makes this even more surprising is that the options for treatment did NOT include hormonal management as per our own Ministry of Health guidelines and those of many other countries. Possible explanations for their success at management include over self-diagnosis of dysmenorrhoea, a placebo effect, or indeed some highly successful conservative management options that need further evaluation.

Reference: *J Endometr Pelvic Pain Disord* 2021;13(2):127-35
[Abstract](#)

Independent commentary provided by Dr Anil Sharma
MB ChB DGM Dip Legal Med FRANZCOG FRCOG

Anil works in gynaecology private practice from Ascot Central. His key interests are in menstrual problems including fibroids, ovarian cysts, urogynaecology (prolapse and urinary incontinence) and endometriosis. He undertakes complex hysteroscopic, laparoscopic and traditional surgery as well as endometrial ablation. Anil's training was in the UK and New Zealand and he enjoys postgraduate teaching. He strives to keep his practice evidence-based and involves patients in decision-making and informed consent.

