

About Premenstrual Syndrome (PMS) & menstrual pain

About Premenstrual Syndrome (PMS) & menstrual pain

- **Premenstrual syndrome (PMS)** refers to a range of physical and emotional symptoms that occur prior to menstruation, and typically resolve once the period begins.¹
- PMS occurs due to hormonal changes during the menstrual cycle.¹
- **Menstrual pain (dysmenorrhoea)** is defined as pain during the menstrual cycle, usually located in the lower abdomen, which may radiate to the inner thighs and back.²
- There are two types of menstrual pain:
 - Primary dysmenorrhoea – pain caused by prostaglandins (chemicals made in the lining of the uterus that cause it to contract);³ and
 - Secondary dysmenorrhoea – pain caused by an underlying health condition or structural abnormality within, or external to the uterus, such as endometriosis or fibroids.³
- The menstrual cycle or a 'period' is a natural, hormone-regulated process occurring roughly every month, lasting between three and seven days.⁴
- During a period, the lining of the uterus (endometrium) sheds, presenting as bleeding through the vagina.⁴

Prevalence

- As many 85 per cent of women experience period pain,⁵ and up to half (47.8 per cent) battle PMS symptoms.⁶
- In Australia, more than 90 per cent of women under 25 years of age experience menstrual issues, including menstrual pain.⁷

Symptoms

- Common PMS symptoms reported by Australian women include:⁸
 - Emotional changes, including depressed mood, anxiety, irritability, and mood swings;
 - Physical symptoms, such as bloating, fluid retention, breast tenderness, headaches, and muscle or joint pain; and
 - Compromised wellbeing, including fatigue, skin issues, and digestive changes, such as constipation or diarrhoea.
- Common symptoms of menstrual pain reported by Australian women include:^{3, 9}
 - Cramping or a feeling of heaviness in the pelvic area;
 - Pain in the stomach, lower back, and legs;
 - Gastrointestinal symptoms, including nausea or diarrhoea; and
 - General wellbeing effects, including a pale appearance, fatigue (tiredness), and insomnia (sleep problems).
- While experiencing some discomfort during a period is normal, it should not interfere with daily life.⁹



Causes & risk factors

Although the exact cause of **PMS** is unknown, most healthcare providers believe PMS occurs due to hormonal changes relating to the menstrual cycle.¹⁰

Risk factors for PMS include:^{11, 12}

- Lifestyle factors – poor diet, inadequate sleep, and low levels of regular exercise which can make symptoms worse;
- A personal or family history of depression or anxiety disorders; and
- High stress levels.

Menstrual pain is triggered by hormone-like substances called prostaglandins, which cause uterine muscle contractions. Higher prostaglandin levels are linked to more severe pain.¹³

Menstrual pain may also be caused by underlying conditions such as:¹³

- Endometriosis – uterine-like tissue growing outside the uterus;
- Uterine fibroids – non-cancerous growths in the uterine wall;
- Adenomyosis – uterine lining tissue growing into the muscle wall;
- Pelvic inflammatory disease – infection of the reproductive organs; and
- Cervical stenosis – an unusually small cervical opening that blocks menstrual flow and increases pressure.



Risk factors for menstrual pain include:¹³

- Aged under 30 years;
- Early puberty (commencing at 11 years of age or earlier);
- Heavy menstrual bleeding and/or irregular menstrual bleeding;
- Family history of menstrual cramps; and
- Smoking.

Impact on quality of life

- Daily, social, and professional life is disrupted in nearly half of Australian women experiencing menstrual pain or PMS.¹⁴
- Physical discomfort and fatigue from menstrual symptoms often leads to avoidance of social events, school commitments, and sporting activities.¹⁵
- PMS can result in poor sleep, reduced productivity at work or school, increased need for medical care, and relationship difficulties.¹⁶
- PMS and menstrual pain can significantly compromise a woman's emotional wellbeing, leading to anxiety, depression, and a loss of confidence.¹⁷⁻¹⁹
- Stigma, shame, and embarrassment associated with discussing periods can exacerbate the impact of menstrual symptoms.^{14, 20}
- Intimate relationships may also be affected as pain, low mood, and reduced libido can compromise sexual activity.²¹

Diagnosis

- A GP is most commonly the first point of contact for those experiencing PMS and/or menstrual pain.⁹
- A GP assesses medical history, affect on quality of life, and may perform a physical examination.²²
- A GP may recommend further tests to determine the cause of menstrual pain, such as an ultrasound or MRI imaging, blood tests, cervical or vaginal swabs, hysteroscopy (use of a small, thin camera to examine the uterus / womb, to check for any problems), and laparoscopy (a minimally invasive procedure where a doctor makes small cuts in the abdomen to insert a tiny camera and special instruments, to diagnose or treat health issues, such as endometriosis or cysts).²³
- To diagnose PMS, a GP may ask a woman to keep a symptom diary over at least two menstrual cycles, to assess their timing, duration, and impact on daily life.¹



Management & treatment

- Concerningly, around half of reproductive-age women who experience bothersome periods fail to raise this with a doctor because they think their symptoms are “not bad enough.”²⁴
- One in three women fail to seek medical advice on the mistaken belief that nothing can be done about their symptoms.²⁴
- The main treatments for PMS and menstrual pain include:^{1, 25-28}
 - Lifestyle modifications, including regular exercise, stress management, heat therapy, and a balanced diet, which can help to reduce symptoms;
 - Khapregesic® – a clinically tested, plant-based, drug-free solution proven to help relieve menstrual pain and PMS;
 - Pain relief medications, such as over-the-counter NSAIDs (e.g., ibuprofen or naproxen), which help to alleviate cramps and physical discomfort;
 - Hormonal treatments, including oral contraceptives, progestin-only pills, or hormonal IUDs, which can help regulate hormones and reduce uterine contractions or PMS symptoms;
 - Antidepressants (SSRIs), which may be prescribed for mood-related PMS symptoms, such as anxiety, irritability, or depression; and
 - Specialist interventions, including imaging (ultrasound or MRI) or surgical options like laparoscopy, which may be considered if menstrual pain is caused by underlying conditions such as endometriosis.

ends#

For more information regarding this backgrounder, please contact:

Kirsten Bruce or Alia Din, VIVA! Communications

T 02 9968 3741

M 0401 717 566 / 0403 878 645

E kirstenbruce@vivacomunications.com.au / alia@vivacomunications.com.au

References

1. Direct H. Premenstrual Syndrome (PMS) 2025 [Available from: <https://www.healthdirect.gov.au/premenstrual-syndrome-pms>].
2. Khan. HNKCMa. Dysmenorrhea. StatPearls. 2023.
3. Direct H. Painful periods (dysmenorrhoea) 2025 [Available from: <https://www.healthdirect.gov.au/painful-periods#:~:text=seek%20medical%20help,-What%20causes%20period%20pain%3F,due%20to%20a%20health%20condition>].
4. Channel BH. The menstrual cycle 2025 [Available from: <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/menstrual-cycle>].
5. Schoep ME, Nieboer TE, van der Zanden M, Braat DDM, Nap AW. The impact of menstrual symptoms on everyday life: a survey among 42,879 women. Am J Obstet Gynecol. 2019;220(6):569.e1-e7.
6. A DM, K S, A D, Sattar K. Epidemiology of Premenstrual Syndrome (PMS)-A Systematic Review and Meta-Analysis Study. J Clin Diagn Res. 2014;8(2):106-9.
7. Lauren Cameron AMW, Emma Sciberras, Marilla Druitt, Katherine Stanley and Subhadra Evans. Menstrual pain in Australian adolescent girls and its impact on regular activities: a population-based cohort analysis based on Longitudinal Study of Australian Children survey data. The Medical Journal of Australia. 2024;220(9).
8. Clinic M. Premenstrual syndrome (PMS) 2025 [Available from: <https://www.mayoclinic.org/diseases-conditions/premenstrual-syndrome/symptoms-causes/syc-20376780>].
9. Channel BH. Period pain – dysmenorrhoea 2025 [Available from: <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/menstruation-pain-dysmenorrhoea>].
10. Health O-OoWs. Premenstrual syndrome (PMS) 2025 [Available from: <https://womenshealth.gov/menstrual-cycle/premenstrual-syndrome>].
11. Clinic C. Premenstrual Syndrome 2025 [Available from: <https://my.clevelandclinic.org/health/diseases/24288-pms-premenstrual-syndrome>].
12. Sharma. PRGGK. Premenstrual Syndrome. StatPearls. 2023.
13. Clinic M. Menstrual Cramps 2025 [Available from: <https://www.mayoclinic.org/diseases-conditions/menstrual-cramps/symptoms-causes/syc-20374938>].
14. Zealand BAN. The menstrual load: 1-in-3 Australian women surveyed believe they may have undiagnosed "heavy menstrual bleeding (1)", heavily impacting their everyday life 2023 [Available from: <https://www.bayer.com.au/en/the-menstrual-load-1-in-3-australian-women-surveyed-believe-they-may-have-undiagnosed-heavy#:~:text=For%20younger%20people%20who%20have,from%20living%20a%20full%20life>].
15. University WS. Period pain is impacting women at school, uni and work. Let's be open about it 2019 [Available from: https://www.westernsydney.edu.au/newscentre/news_centre/story_archive/2019/period_pain_is_impacting_women_at_school_uni_and_workLets_be_open_about_it#:~:text=Missing%20class%20and%20missing%20out,good%20health%2C%20particularly%20during%20adolescence].
16. Demirhan Kayacik A, Ilcioglu K. Life satisfaction in individuals with premenstrual syndrome: Scale development and evaluation of psychometric properties. Journal of Affective Disorders. 2025;388:119757.
17. Australia FP. Premenstrual Syndrome (PMS) 2025 [Available from: <https://www.reproductiveandsexualhealth.org.au/handbook/chapter-7/premenstrual-syndrome-pms>].
18. Zhao S, Wu W, Kang R, Wang X. Significant Increase in Depression in Women With Primary Dysmenorrhea: A Systematic Review and Cumulative Analysis. Front Psychiatry. 2021;12:686514.
19. Conversation T. Girls with painful periods are twice as likely as their peers to have symptoms of anxiety or depression 2025 [Available from: <https://theconversation.com/girls-with-painful-periods-are-twice-as-likely-as-their-peers-to-have-symptoms-of-anxiety-or-depression-256232>].
20. Armour M, Duffy, S., Gilbert, E., Hammond, H., Hawkey, A., O'Shea, M., Smith, M., Taylor, C., Ussher, J. What's the bloody big deal? How Australian workplaces and educational institutions can help break the menstrual taboo. Western Sydney University. 2022.
21. Health JHfWs. What can affect your sex life? 2024 [Available from: <https://www.jeanhailes.org.au/health-a-z/sex-sexual-health/what-can-affect-your-sex-life#physical-health>].
22. GNotebook. Premenstrual Syndrome Management 2024 [Available from: <https://gnotebook.com/en-AU/pages/gynaecology/premenstrual-syndrome/management>].
23. MEDCARE -. Period Pain- Symptoms, Diagnosis, and Treatment 2022 [Available from: <https://24-7medcare.com.au/pain/period-pain/>].
24. Survey JHNWsH. Bothersome periods experienced by Australian women aged 18 to 44 years. 2023.
25. Andrew M Kaunitz M. Hormonal contraception for menstrual suppression 2024 [Available from: <https://www.uptodate.com/contents/hormonal-contraception-for-menstrual-suppression>].
26. Women WUf. Endometriosis 2020 [Available from: <https://www.westernultrasound.com.au/endometriosis/>].
27. Sister! H. Khapregesic® 2025 [Available from: https://heysister.com/pages/our-science?srsltid=AfmBOorSfN2qkISPvyc68es4HBjSx0d7xlh-yMIO3lzD_jGZ6rE_kt_K].
28. Lopresti AL, Smith SJ, Ferdinand FR. An Examination into the Safety and Efficacy of Khapregesic(®), a Khaya Senegalensis Preparation, on Women Experiencing Menstrual Pain and Menstrual Distress: A Randomized, Double-Blind, Placebo-Controlled Trial. Int J Womens Health. 2025;17:2025-38.