

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**PREMENSTRUAL SYNDROME (PMS)****WHAT IS IT?**

Up to 75% of menstruating individuals experience premenstrual symptoms, which includes a wide range of physical and emotional symptoms, during the week prior to the start of their menses. These symptoms are typically mild and often include bloating and breast soreness.

In contrast, 3-8% of patients experience **premenstrual syndrome (PMS)**, a condition in which premenstrual symptoms are so severe that they interfere with some aspect of their daily life, such as school, work, relationships, etc.

2% of individuals experience a severe form of PMS known as **premenstrual dysphoric disorder (PMDD)**, in which emotional symptoms (like mood swings, depressed mood, anxiety/tension, and irritability/anger) are more prominent.

**WHAT CAUSES IT?**

During a normal menstrual cycle, rising and falling levels of hormones (eg. estrogen and progesterone) influence neurotransmitters in the brain (eg. serotonin) known to affect mood. Patients with PMS/PMDD appear to have an abnormal neurotransmitter response to these normal hormonal changes.

Genetic factors, cigarette smoking, and a history of traumatic events or anxiety disorder also seem to play a role.

**WHAT ARE THE SYMPTOMS?**

Symptoms can vary widely. The most common symptoms of PMS are fatigue, abdominal bloating, and mood swings. Other common symptoms include:

**❖ Physical Symptoms**

- Breast tenderness.
- Headache, dizziness.
- Hot flashes.
- Appetite changes, nausea, vomiting, constipation, diarrhea.
- Swelling of the hands and feet, joint pain.

**❖ Emotional Symptoms**

- Crying spells, depressed mood.
- Anxiety, tension.
- Irritability, anger.
- Forgetfulness, poor concentration.
- Lack of interest in usual activities.
- Increased sensitivity to rejection.

**HOW IS IT DIAGNOSED?**

Diagnosis can be complicated because PMS presents with a wide variety of symptoms. Keeping a calendar or journal of symptoms for at least 2 months is often helpful. To be diagnosed with PMS:

- Symptoms should consistently appear during the week before your period and disappear within a few days after the start of your period.
- Symptoms are severe enough to interfere with normal functioning.
- Physical exam and lab findings are normal.

**HOW IS IT TREATED?****❖ Lifestyle Changes**

- Aerobic exercise is helpful in decreasing fluid retention, reducing stress, and improving mood. It is best to exercise regularly (30 minutes daily), not just when PMS symptoms are present.
- Relaxation techniques and stress management can also help control symptoms. Stress often worsens PMS and PMDD; conversely, PMS and PMDD often lead to increased stress levels. Breathing exercises, meditation, yoga, or massage can improve symptoms. To learn more about mindfulness and stress management, visit Student Health's Mental Health Resources website at <https://health.students.vcu.edu/patient-resources/mental-health/>.

Examples of recommended resources include:

- Mindfulness websites and apps to reduce stress, such as [www.freemindfulness.org](http://www.freemindfulness.org) and [www.calm.com](http://www.calm.com).
- VCU's Health Promotion and Well-Being Center (The WELL) (804-828-9355), whose staff offers a variety of services, including individualized help with stress management.
- Individual and group therapy at University Counseling Services (804-828-6200 at Monroe Park or 804-828-3964 at MCV) for anxiety, depression, & other mental health conditions.
- Limit alcohol, caffeine, and salt intake during the premenstrual phase (the week or two before your period).
  - Reduce caffeine use because it can increase breast swelling/tenderness and worsen anxiety. This includes caffeine found in chocolate and many medications, such as decongestants, headache medications (eg. some forms of Excedrin), and over-the-counter menstrual medications (eg. Pamprin Max, Midol Complete).
  - Limit sodium intake to decrease fluid retention and bloating.
- Drink plenty of water.
- Eat 5-6 small meals a day to keep blood sugar levels stable and to decrease bloating.
- Add calcium-rich foods such as yogurt and leafy greens.
- Eat foods high in complex carbohydrates, such as whole grains, fruits, and vegetables.
- Avoid concentrated unrefined sugars, such as sugar, honey, candy, soda, and ice cream.

#### ❖ Medications

- Anti-inflammatory medications, such as ibuprofen (Advil or Motrin) or naproxen (Aleve), taken regularly 1-3 days prior to the start of your menses can counteract the body's release of chemicals that cause menstrual cramping.
- Selective serotonin reuptake inhibitors (SSRIs) are highly effective in treating the symptoms of PMS and PMDD. 60-70% of women with PMDD improve on an SSRI; mood symptoms are often more responsive than physical symptoms. Fluoxetine (Prozac) and sertraline (Zoloft) are approved for use in PMDD but citalopram (Celexa) and escitalopram (Lexapro) seem to be equally effective.
  - These medications are typically started on day 14 of your cycle (day 1 is the first day of your period) and discontinued at the onset of your menses (or a few days later). Some patients may prefer to take these medications daily, especially if symptoms are severe.
  - These medications should be taken for at least 2 menstrual cycles before a decision is made about their effectiveness.
- Oral contraceptive pills can help with headaches, breast tenderness, and mood swings. The pill can also be taken continuously to avoid having a menstrual period; in theory, this will prevent the hormonal changes that affect mood.
  - To skip a period, take all the active pills in a pill pack as usual. When you get to the placebo week, skip the placebo pills and start a new pack right away.
- Other hormonal medications may be prescribed by a specialist if symptoms are severe and unresponsive to typical treatment options.

#### ❖ Vitamins, Supplements, & Herbal Products

- Chasteberry is a popular herbal remedy that a small number of studies has shown may be an effective treatment for mild PMS symptoms. The most common dosing studied was 20mg to 40mg of chasteberry extract.
- Studies of other popular dietary supplements, including calcium, magnesium, Vitamin B6, Vitamin E, evening primrose oil, and ginkgo biloba, have shown no consistent benefit in the treatment of PMS.
- In general, dietary supplements and herbal products should be used with caution as they are not regulated by the FDA, making standardization impossible. Independent testing laboratories (like [www.consumerlab.com](http://www.consumerlab.com)) may provide more reliable information regarding the contents of these products. The long-term safety of many products is also unknown.

**RECOMMENDED WEBSITES:** [www.acog.org](http://www.acog.org) [www.familydoctor.org](http://www.familydoctor.org), [www.mayoclinic.org](http://www.mayoclinic.org)