



## Evaluation and Management of Premenstrual Syndrome and Premenstrual Dysphoric Disorder

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Objective: To review premenstrual disorders, their varied symptoms, possible etiology, and treatment options. Data Sources: Published articles identified through MEDLINE (1966-2001) using the search terms premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) and the additional terms treatment and etiology. Additional references were identified from the bibliographies of the retrieved articles. Data Synthesis: PMS refers to a group of menstrually related disorders that are estimated to affect up to 40% of women of childbearing age. The varied symptoms of PMS include mood swings, tension, anger, irritability, headache, bloating, and increased appetite with food cravings. PMS symptoms occur during the luteal phase of the menstrual cycle and remit with the onset of menstruation or shortly afterward. Approximately 5% of women with PMS suffer from PMDD, a more disabling and severe form of PMS in which mood symptoms predominate. Because no tests can confirm PMS or PMDD, the diagnosis should be made on the basis of a patient-completed daily symptom calendar and the exclusion of other medical disorders. The causes of PMS and PMDD are uncertain, but are likely associated with aberrant responses to normal hormonal fluctuations during the menstrual cycle. For most women, symptoms can be relieved or reduced through lifestyle interventions, such as dietary changes and exercise, and drug therapy with hormonal or psychotropic agents. For PMDD, selective serotonin reuptake inhibitors have recently emerged as first-line therapy. Certain dietary supplements, including calcium, also may be an option for some women. Conclusion: PMS and PMDD are complex but highly treatable disorders. Pharmacists can improve the recognition and management of these common conditions by providing patient education on premenstrual symptoms and counseling women on lifestyle interventions and pharmacotherapy to relieve their discomfort.

J Am Pharm Assoc. 2001;41:437-47.

In the last decade, understanding of premenstrual disorders has undergone a transformation. Premenstrual syndrome (PMS) is now viewed as a complex psychoneuroendocrine disorder that is known to affect women's emotional and physical well-being. PMS is no longer considered a single condition, but a group of menstrually related disorders and symptoms. Broadly defined, PMS is the constellation of emotional, behavioral, and physical symptoms that occur during the premenstrual (luteal) phase of the menstrual cycle and resolve after the start of menses. Premenstrual symptoms sufficient to impair daily life and relationships are estimated to affect up to 40% of women of reproductive age.

Received January 20, 2001, and in revised form March 3, 2001. Accepted for publication March 9, 2001.

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Approximately 5% of these women suffer from premenstrual dysphoric disorder (PMDD), a severe form of PMS marked by adverse mood symptoms.<sup>3</sup>

Recent insights into PMS and PMDD have led to the development of improved treatments for these disorders and expanding opportunities for pharmacists to contribute to this important area of women's health care. With the increasing use of dietary supplements and the long-established use of nonprescription drugs for PMS self-care, the pharmacist may be the first health care professional a patient consults for premenstrual complaints. By staying up to date with current research on premenstrual disorders and new management options, pharmacists can help women to better understand their symptoms and benefit from a rational, individualized treatment plan.

## Clinical Presentation and Diagnosis

PMS can cause a variety of disturbing symptoms that can affect mood, cognition, and physical well-being. Although more than 100 premenstrual symptoms have been described, common