Female-Specific Mood Disorders

By Meir Steiner, MD, PhD, FRCPC

Evaluating physical, social, and mental impacts of disease, and using the disability-adjusted life-year formula, depression was the fourth leading cause of morbidity and mortality on the Global Burden of Illness list in 1990 and is predicted to be the first leading cause by the year 2020. The morbidity associated with depression in women is even greater. Not only do at least twice as many women suffer from the disorder when compared to men, but women also have a higher rate of depression-associated comorbid conditions (both physical and mental). From the age of menarche until well after menopause, women suffer from specific mood disorders, including premenstrual dysphoria, depression associated with pregnancy and the postpartum period, and mood disorders associated with perimenopause, menopause, and beyond. Untreated depression in elderly women is associated with an almost four-fold increase in mortality rates when compared to nondepressed, age-matched women.

The evolutionary perspective suggests that possible male-female asymmetries in preference for certain types of relationships, a differential investment in reproduction and offspring, social options (or the lack of), genetic vulnerability, environmental stress, and early life experiences all contribute to the fact that women are more prone to mood and mood-related disorders than men. While it is widely recognized that mood disorders are more common in women, it is still the case that depression is underdiagnosed and undertreated.

It is imperative that we learn about sex and gender differences in the etiology, presentation, prevention, and treatment of mood disorders. It is certainly not the case that the failure to recognize depression in women is due to the fact that they present less frequently to their physician. Until very recently, women were systematically discriminated against in medical research in the United States and elsewhere. In 1977, the US Food and Drug Administration issued a guideline for the clinical evaluation of drugs that mandated the exclusion of women with childbearing potential. These guidelines were revised only in 1993; however, pharmaceutical companies and funding agencies have been slow in adopting the new recommendations. Reports on sex differences in drug pharmacokinetics, pharmacodynamics, and response in both animals and humans should have by now convinced everyone of the importance of including women in all phases of clinical trials. The National Institutes of Health, which has created the Office for Research on Women’s Health, is not only devoting its attention to the inclusion of women in clinical trials, but also has become a watchdog to ensure that women’s health research is an integral part of the scientific fabric.

This issue of CNS Spectrums aims to present an overview of the latest research on the psychobiology of the major female-specific mood disorders, as well as results from recent treatment trials in this population.

Leslie Born writes about the relationship between menarche and depression in young girls and the possible reasons for the dramatic shift in the gender proportion of depression to a 2:1 female to male ratio around the time of puberty. She also provides up-to-date information regarding the management of depression in adolescence, including gender differences in the presentation of depressive symptoms, instruments to facilitate assessment, and treatment options. The topic of premenstrual dysphoria is presented by Elias Eriksson and colleagues as an illustrative example of how serotonin modulates sex steroid-related behaviors. Zachary Stowe and his team review the topic of mood disorders during pregnancy and postpartum with a special emphasis on the risk/benefit assessment for the pharmacotherapy of these disorders in pregnant and breastfeeding mothers. Finally, Claudio Soares and Lee Cohen present an update on mood disorders associated with perimenopause, including a management algorithm for treating depressive symptoms in middle-aged women.

It is estimated that 7 million US women suffer from major depressive disorder at any given time, and the prevalence worldwide is much the same. This is the single most serious mental health problem for women. For many of these women, the only physician they might see is their obstetrician-gynecologist or general practitioner. This puts psychiatrists in a very unique domain within academic medicine.

It is the purpose of this special issue to draw the attention of as many healthcare professionals as possible to the present state of knowledge of mood disorders in women, from bench to bedside. We hope that the information provided here will not only improve the care of women, but will also be an incentive to further study those areas where our knowledge is still incomplete.