

Advances in neurobiology, assessment and treatment of female-specific mood disorders

Papers from a symposium presented at the joint congress of the Collegium Internationale Neuro-Psychopharmacologicum and the Canadian College of Neuropsychopharmacology, Chicago, July 11, 2006

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Depression is currently one of the leading causes of disability on the global burden of disease list worldwide and is predicted to rank second by the year 2020.¹ The morbidity associated with mood disorders in women is even greater. Not only do more women suffer from mood, anxiety and stress-related disorders when compared with men, they also have a much higher rate of comorbid conditions, both physical and mental. From the age of menarche and on, women also suffer from specific mood and anxiety disorders that include premenstrual dysphoria and perinatal and perimenopausal depression, as well as from mood disorders associated with infertility and pregnancy loss.² In addition, the prevalence of mood symptoms associated with the reproductive cycle in women with previously established affective disorders is also greater than during other periods in their lives.³ Moreover, untreated depression in elderly women is associated with an almost 4-fold increase in mortality rates when they are compared with nondepressed, age-matched women.⁴

Women also suffer more from eating disorders and autoimmune disease, have less tolerance for alcohol and have a higher prevalence of pain-related disorders. They suffer more from jet lag and shift work and experience greater seasonal affective changes.

The evolutionary perspective suggests that possible male–female asymmetries in preferences for certain types of relationships and a differential investment in reproduction and offspring, as well as social and environmental circum-

stances, all contribute to women’s greater vulnerability to these disorders.

It is therefore imperative that we learn more about sex and gender differences in the causes, presentation, prevention and treatment of mood, anxiety and stress-related disorders.

Several recent publications have made major contributions to increasing our awareness of the magnitude of the problem. The Institute of Medicine has published a report with the subtitle *Does Sex Matter?*⁵ Not only did the report conclude that indeed “sex matters,” it also made 14 specific recommendations as to how to promote research on sex differences and identified ways to address barriers to progress.

An offshoot of the report is a more recent review describing methods and procedures to assist scientists new to the field to design and conduct experiments aimed at investigating sex differences in both laboratory animals and humans.⁶ An extended version of this review has now also been published by the same group of investigators in a book titled *Sex Differences in the Brain: From Genes to Behavior*.⁷ Recently, several books on women’s mental health aimed more specifically at an audience of mental health care providers have also appeared.^{8–14}

The set of 5 manuscripts published in this issue are updated versions of presentations made at a symposium on female-specific mood disorders presented at the 2006 meeting of the Collegium Internationale Neuro-Psychopharmacologicum and the Canadian College of Neuropsychopharmacology in Chicago.

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We hope that we have been successful in raising the awareness of our audience to the specificity of these disorders in more than one way.

Competing interests: Dr. Steiner is a consultant with GlaxoSmithKline, Wyeth Pharmaceuticals, Bayer Shering Pharmaceuticals, AstraZeneca and Azevan Pharmaceuticals. He currently has grant/research support from Wyeth, GlaxoSmithKline, AstraZeneca and Lundbeck and has received honoraria from Ortho-McNeil and Azevan Pharmaceuticals.

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