Depression: What's Sex Got to Do With It?

It was career day in first grade, and the students were to explain what their parents did for a living. Having 2 psychiatrists for parents, my daughter had an interesting task at hand. She asked me, "How is what you do (women's mental health) different than what Daddy does (inpatient psychiatry at the Department of Veterans Affairs)?"

The concept of "women's mental health" isn't all that clear. Certainly, due to the high rates of many psychiatric disorders among women of reproductive age and the reproductive potential of women, the unique risks and benefits of medication exposure in utero and during breastfeeding require clinical expertise and further research. Beyond that, the field of psychiatry still struggles with ascertainment of biological sex differences, the impact and meaning of sex and gender differences, and their clinical relevance.

It seems reasonable that sex and gender would strongly influence the expression of psychiatric disorders. It also seems reasonable that individual factors independent of sex and gender might trump male versus female differences in psychiatric disorder expression and treatment implications. There is increasing awareness regarding the moderators of treatment outcomes.[1] As a field, we do not yet know whether disorders that are defined as occurring at points of the female reproductive cycle really are unique or if our diagnostic criteria create the perception of differences. How different are antenatal depression, postpartum depression, and premenstrual dysphoric disorder compared to DSM-IV mood disorder diagnoses that affect both men and women? Are these reproductive cycle–specific diagnoses contextual differences in the expression of the more generic diagnosis of major depressive disorder or are they unique mood disorders that women are at risk for because of their reproductive events?

Two of the articles that comprise the "Focus on Women's Mental Health" section in this issue inform us about differences between men and women, and 1 informs the treatment of a reproductive cycle–related mood disorder, with results that dramatically differ from what we would expect for a mood disorder that is not sex specific.

McGirr et al. examine gender differences in suicide using psychological autopsies, with psychiatric diagnoses verified by DSM-IV criteria. Scales were also utilized to assess behavioral, personality, and temperamental attributes. They first examined risk variables as a function of sex in an unselected sample of suicides and as a secondary analysis, matched male and female suicide victims for age, diagnosis of depression at time of death, and number of episodes to assess for risk factors specific to gender. The authors' findings suggest that some aspects of psychopathology and behavioral factors are not gender-specific in suicide, while others do appear to differ among men and women (such as prevalence of anxiety disorders and alcohol abuse).

Moreno and colleagues assess biological vulnerabilities in terms of sex differences in subjects with remitted major depressive disorder. In an attempt to understand underlying biological differences between men and women, they found significant differences on tryptophan depletion tests.

In a treatment study of premenstrual syndrome (PMS), Kornstein et al. assessed different medication dosing strategies. Women who met specified criteria for moderate to severe PMS were randomly assigned to sertraline 25 mg, sertraline 50 mg, or placebo, and sequential treatment regimens assessed efficacy of luteal phase dosing, continuous dosing, or dosing that commenced at onset of premenstrual symptoms, over subsequent cycles. Significant improvement was noted with sertraline doses of both 25

and 50 mg with luteal phase dosing, although for the continuous and symptom-onset dosing strategies, the lower dose appeared more beneficial than the higher dose relative to placebo. The response to a lower dose of a selective serotonin reuptake inhibitor has been previously reported in premenstrual mood disorders[2] and appears to set premenstrual mood disorders apart from major depressive disorder. Also, the response to a symptom-onset dosing strategy also appears different than the response to treatment in major depressive disorder and other mood disorders that are not menstrual-cycle specific.

We consider the findings in these articles to provide important contributions to our understanding of sex and gender differences, and we invite your comments on the "Focus on Women's Mental Health" special section. Please email me at marlenef@email.arizona.edu with your feedback.

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