WOMEN'S HEALTH RESEARCH INSTITUTE
NORTHWESTERN UNIVERSITY
Science to Care

Reproductive Related Depressions: Premenstrual Dysphoric Disorder, Perinatal Depression and Perimenopausal Depression
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Overview: The purpose of this presentation is to help you understand the psychological and physiological affects of depression in women through different stages in life. Depression is twice as common in women as it is in men, and over a lifetime, 21% of women will experience depression. Depression is the leading cause of disability worldwide and a major contributor to the global burden of disease. Depression results from multiple genes acting together with environmental factors. Depressive symptoms are associated with ovarian hormone fluctuation, but there is no relationship between serum levels and depressed moods.

Dr. Wisner's Research examines the levels of depression in the menarche, premenstruum, pregnancy, postpartum, and menopausal stages in women's lives.

Major Depression: For two weeks, most of the day nearly every day, 5 of these (one must be mood or interest):

- Depressed mood
- Diminished interest/pleasure
- Weight loss/ gain unrelated to dieting
- Insomnia/ hypersomnia
- Psychomotor agitation/ retardation
- Fatigue or loss of energy
- Feelings of worthlessness/guilt
- Diminished ability to concentrate
- Recurrent thoughts of death

Major Depression and Mood Disorders are brain disorders. Dysregulated neural circuits for control of mood, thought, sleep, appetite, and behavior. Most women do not experience significant mood problems during reproductive transitions. Women experience more stressors more frequently than men. Research indicates that 6-33% of women experience childhood sexual abuse, 15% of women experience adult

sexual assault, and 15-71% of women (across 10 countries) experience male partner violence. These stressors make women more susceptible to depression than men.

Premenstrual Dysphoric Disorder: This disorder affects approximately 5% of menstruating women with an average onset of 26 years of age. While there are minimal symptoms during the Follicular phase, there are severe symptoms during the Luteal Phase. Symptoms include extreme irritability and depression, yet this is very different and distinctive from depression. Treatment using dosages of serotoninergic antidepressants during the Luteal phase has proven results.

Depression During Pregnancy: When treating pregnant women for depression, the risks are often weighed more heavily than the benefits. If not treated, women who are depressed while pregnant will have side effects including appetite, nutrition, cognitive changes which could affect attention to self and infant safety, prenatal care compliance, alcohol and drug use, and loss of personal and family resources. These factors could lead to low birth weight and preterm birth. While many fear that going on antidepressants while pregnant will harm the fetus, research does not support this. Research shows that prenatal antidepressant exposure is not associated with behavioral or emotional problems, nor is it associated with neuromotor function at 6 months. Furthermore, the concern of Neonatal Syndrome, which is most commonly associated with paroxetine, fluoxetine, sertraline, and fluvoxamine, is time-limited (lasting fewer than two weeks) and rarely requires medical intervention.

It is imperative to treat pregnant women for their depression with the minimum effective dosage through pregnancy. What are needed are standardized measurements throughout pregnancy to monitor for symptom changes and pharmacokinetic changes in psychotropic drug levels during pregnancy. This is to optimize maternal treatment without sacrificing the health of the fetus. There is no zero-risk option, and more data are needed to improve efficacy and reduce side effects in pharmacokinetic and pharmacogenetic studies.

Depression in Menopausal Transition: The average age for menopause is 51, and the risk for depression in the perimenopause phase is especially prevalent in women who have had previous episodes. There are many theories about the prevalence of depression during menopause. One theory is the Estrogen Withdrawal Theory that states estrogen enhances serotonergic and noradrenergic transmission. Another theory, christened the Domino Theory, rests on the fact that somatic symptoms, especially sleep disturbance, anxiety, and sexual dysfunction, create risk for depression as a down-line effect. The final theory called the Life Stage Perspective attributes depression resulting from changing family or professional roles, interpersonal losses, aging, and physical illness. Regardless of the impetus for depression, antidepressants and psychotherapy are the first lines of defense in treatment. Research shows that post-menopausal women respond more favorably to tricyclics than to SSRI.

Prioritizing Mental Health: As mental health is fundamental to holistic health, prioritizing the mental state of mothers is essential. Exploring the risks and benefits of all treatment options will help patients make informed decisions on their health.