MOOD DISORDERS ACROSS THE REPRODUCTIVE LIFE SPAN OF A WOMEN

DR. NALINI MISIR
Gender differences in mood disorder/depression
**LIFE TIME PREVALENCE OF PSYCHIATRIC DISORDERS IN WOMEN AND MEN**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>21.3</td>
<td>12.7</td>
</tr>
<tr>
<td>GAD</td>
<td>6.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Bipolar I Disorder</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Bipolar Disorder II</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Seasonal Affective Disorder</td>
<td>6.3</td>
<td>1.0</td>
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<tr>
<td>Panic Disorder</td>
<td>5.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>15.5</td>
<td>11.1</td>
</tr>
<tr>
<td>Anorexia Nervosa</td>
<td>0.5</td>
<td>0.05</td>
</tr>
<tr>
<td>Bulimia</td>
<td>1.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Antisocial Personality Disorder</td>
<td>1.2</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Ref: Kessler et al, Andrade et al, Rosenthal et al, Walters and Kendler et al, Garfinkel et al
Relationship between adolescence and depression
More girls than boys begin to become depressed after age 13, and girls become substantially more depressed than boys during middle–late adolescence (ages 15–18).


PROBABILITY OF EXPERIENCING MDD AS A FUNCTION OF AGE AND GENDER

**FIGURE 1.** Probability of experiencing an episode of major depressive disorder as a function of age and gender.

Adapted from Lewinsohn et al.³

CHARACTERISTICS ASSOCIATED WITH MOOD DISORDERS AROUND MENARCHE

• Strong association between family psychiatric history and depression in adolescents
• Recent stressful events (conflicted romantic relationship, family/personal illness)
• H/o emotional, physical or sexual abuse or exposure to violence
• Early onset of menses is associated with early onset of depression in susceptible adolescents
• Poor relationship with family, or low social support
• Perceived student prejudice or lack of student connectedness with school
• Physical illness or functional impairment

Ref: Born L, Steiner M, CNS Spectrums, Vol 6, No 2, 2001
CLINICAL FEATURES OF DEPRESSION IN ADOLESCENT FEMALES

• Symptoms are similar to adults, except that they might be irritable
• More somatic symptoms compared to men (sleep/appetite disturbance, fatigue)
• Comorbid anxiety
• Negative body image, low self esteem, or negative perception of menstruation
• Guilt feeling, suicidal ideation
ASSESSMENT OF MOOD AND COMORBID DISORDERS IN ADOLESCENTS

Screening:
- *Children’s Depression Inventory (CDI)*
- *Children’s Interview for Psychiatric Syndrome (ChIPS)*

Diagnosis:
- *National Institute of Mental Health Diagnostic Interview Schedule for Children (Version IV) (NIMH DISC IV)*
- *Schedule for affective disorders and Schizophrenia for School age Children (K-SADS)*
- *Diagnostic Interview for children and Adolescents (DICA)*
- *The Child and Adolescents psychiatric assessment (CAPA)*

*Ref: Born L, Steiner M, CNS Spectrums, Vol 6, No 2. 2001*
CHARACTERISTICS THAT MAY PREDICT POOR RESPONSE TO TREATMENT

- Younger age
- Higher level of cognitive distortion and hopelessness at intake
- Comorbid anxiety or conduct disorder
- Family psychiatric history
- Greater externalizing problems (aggression/delinquency)
- Academic Problems
- Non voluntary treatment referral
- Lack of cohesion with treatment group

Ref: Born L, Steiner M, CNS Spectrums, Vol 6, No 2. 2001
TREATMENT OF ADOLESCENTS WITH DEPRESSION/AFFECTIVE DISORDERS

- Cognitive Behavioral Therapy
- Interpersonal Therapy for adolescents
- SSRI’s/mood stabilizers
Premenstrual Dysphoric Disorder
ETIOLOGICAL THEORIES FOR PMDD

- No single etiology has been established
- Normal fluctuation of plasma concentration of reproductive hormones appear to produce psychological symptoms in susceptible women
- Changes in levels of estrogen, progesterone, FSH, LH, cortisol, dihydrotestosterone, TSH, endogenous opioids, GABA, serotonin have been hypothesized
- PMDD occurs only in menstruating women, does not occur prior to menarche, or after menopause and in pregnant women or in Postpartum women before they start menstruating again

DSM 5 PMDD

- 4 research criteria (A through D) for the diagnosis of PMD
- Criterion A is that in most menstrual cycles during the past year, at least 5 of the following 11 symptoms (including at least 1 of the first 4 listed) were present:
  - Markedly depressed mood, feelings of hopelessness, or self-deprecating thoughts
  - Marked anxiety, tension, feelings of being “keyed up” or “on edge”
  - Marked affective lability (e.g., feeling suddenly sad or tearful or experiencing increased sensitivity to rejection)
  - Persistent and marked anger or irritability or increased interpersonal conflicts
  - Decreased interest in usual activities (e.g., work, school, friends, and hobbies)
  - Subjective sense of difficulty in concentrating
  - Lethargy, easy fatigability, or marked lack of energy
  - Marked change in appetite, overeating, or specific food cravings
  - Hypersomnia or insomnia
  - A subjective sense of being overwhelmed or out of control
  - Other physical symptoms, such as breast tenderness or swelling, headaches, joint or muscle pain, a sensation of bloating, or weight gain
- The symptoms must have been present for most of the time during the last week of the luteal phase, must have begun to remit within a few days of the onset of menstrual flow, and must be absent in the week after menses.
- Criterion B is that the symptoms must be severe enough to interfere significantly with social, occupational, sexual, or scholastic functioning. For example, the patient may avoid social activities or exhibit decreased productivity and efficiency at work or school.
- Criterion C is that the symptoms must be discretely related to the menstrual cycle and must not merely represent an exacerbation of the symptoms of another disorder, such as major depressive disorder, panic disorder, dysthymic disorder, or a personality disorder (although the symptoms may be superimposed on those of any of these disorders).
- Criterion D is that criteria A, B, and C must be confirmed by prospective daily ratings during at least 2 consecutive symptomatic menstrual cycles. The diagnosis may be made provisionally before this confirmation.
FLOW CHART FOR THE DIAGNOSIS OF PMDD VS PMS VS PME

Ref: www.womensmentalhealth.org
### Premenstrual Daily Symptom Chart

**Name:** Jane Doe  
**Month:** September

1. Circle the days of your menstrual period on the lower labelled Day of Month.
2. Begin your ratings today. For example, if today is the 12th day of the month, mark your symptoms on the column labelled 12. At the same time every day, mark or pen in the correct numbered box to show how severe each symptom was over the past 24 hours. Leave the symptom blank if you had no problem with that symptom. See example on the right. If you forget to fill in a box, please circle it. Enter the Day of Month box to signify that you did not fill in the chart for that day.
3. Continue on new page on the first day of the next month.

| Symptom                          | Day of Month 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|----------------------------------|----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Irritability                     |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Sudden mood changes              |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Tension                          |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Sadness                          |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Decreased interest in usual activities |        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Feeling overwhelmed              |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Difficulty concentrating         |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Bloating                         |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Breast tenderness                |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Food cravings                     |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Lack of energy                   |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Change in sleep                  |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Relationship problems            |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Other: Headache                  |                |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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**Premenstrual Daily Symptom Chart**

**Name:** June Doe  
**Month:** March

1. Circle the days of your menstrual period in the correct labeled Day of Month.
2. Begin your ratings today. For example, if today is the 12th day of the month and you mark your symptoms in the column labeled 12, at the same time each day, use a marker or pen to fill in the correct numbered box to show how severe each symptom was over the past 24 hours, based on the symptom tracker. If you had no problems with that symptom, see example on the right. If you forgot to fill in a day place an X in the Day of Month bar to signify that you did not fill in the chart for that day.
3. Continue on new page on the first day of the next month.

### Example:

<table>
<thead>
<tr>
<th></th>
<th>none</th>
<th>mild</th>
<th>moderate</th>
<th>severe</th>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Symptoms

- Irritability
- Sudden mood changes
- Tension
- Søadness
- Decreased interest in usual activities
- Feeling overwhelmed
- Difficulty concentrating
- Bloating
- Breast tenderness
- Food cravings
- Lack of energy
- Change in sleep
- Relationship problems
- Other

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**PMDD**
### Premenstrual Daily Symptom Chart

Name: Jane Doe  
Month: July

1. Circle the days of your menstrual period in the row labeled Day of Month.

2. Begin your ratings today. For example, if today is the 15th day of the month, mark your symptoms in the column started 15. At the same time each day, use a marker or pen to fill in the correct numbered box to show how severe each symptom was over the past 24 hours, lowest to greatest. If you had no problems with that symptom, simply leave the box empty. If you forgot to fill in a box, please put 0 in the Day of Month box to signify that you did not fill in the chart for that day.

3. Continue on new page on the first day of the next month.

| Day of Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|--------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

#### Symptoms

- **Irritability**
- **Sudden mood changes**
- **Tension**
- **Sadness**
- **Decreased interest in usual activities**
- **Feeling overwhelmed**
- **Difficulty concentrating**
- **Bloating**
- **Breast tenderness**
- **Food cravings**
- **Lack of energy**
- **Change in sleep**
- **Relationship problems**

**Other:** Suicidal thoughts

---

**Depression**
TREATMENT FOR PMDD: PSYCHOTROPICS

- Fluoxetine 20 mg po daily*
- Sertraline 50 to 150 mg po daily*
- Paroxetine CR 12.5 to 25 mg po daily*
- Citalopram 5 to 20 mg po daily
- Escitalopram 10 to 20 mg po daily
- Venlafaxine 75 mg po daily
- Clomipramine 25 to 75 mg po daily
- Alprazolam 0.5 to 5 mg for symptomatic treatment
- * Approved by the FDA for full cycle and luteal phase dosing

TREATMENT FOR PMDD: OVULATION SUPPRESSION

- Yaz (OC containing ethinylestradiol 20 mcg/drospirenone 3 mg)*
- Transdermal estrogen, 2 patches at 100 mcg, every 3 days throughout the cycle
- GnRH agonist (Lupron 3.75 to 7.5 mg IM every month)
- Danazol 200 to 400 mg po daily from onset of symptoms to first day of menses

*Approved by the FDA for women desiring contraception.

Ref: Altshuler et al.1995, Freeman et al.2001
TREATMENT FOR PMDD: OTHER TREATMENTS

- Bromocryptine for mastalgia, 2.5 mg/daily just before ovulation to the onset of menses
- Spironolactone 100 mg daily during the luteal phase, for bloating, breast tenderness, water retention
- Calcium 600 mg PO BID
- Chaste berry 20 mg/day
- Magnesium 200 to 400 mg/day
- CBT

Menstrual Psychosis
Infertility
DEPENDS ON THE CAUSATIVE FACTOR

GnRH agonist like Lupron, Goserelin, etc are used in treatment of endometriosis, which may cause depression/emotional lability

Clomiphene is used for induction of ovulation in cases of ovulatory dysfunction, which can cause depression, insomnia
GNRH AGONIST

- **Leuprolide (Lupron)**
- **80% of women taking Lupron experience depression**
- **Sertraline is useful in depression associated with GNRH agonist**


CLOMIPHENE

- Used for infertility associated with PCOS and in ovarian dysfunction
- Psychiatric symptoms: anxiety, irritability, sleep disturbances, mood lability
- Treatment: is symptomatic

DOPAMINE AGONIST

- Bromocryptine
- Cabergoline
- Can experience depression, somnolence, even psychosis
- Treatment: symptomatic
Table 2

Drugs inducing sustained hyperprolactinemia

<table>
<thead>
<tr>
<th>Category</th>
<th>Typical</th>
<th>Atypical</th>
<th>Tricyclics</th>
<th>SSRI</th>
<th>MAO-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>Haloperidol Chlorpromazine, Thioridazine, Thiothixene</td>
<td>Risperidone, Amisulpride, Molindone, Zotepine</td>
<td>Amitriptyline, Desipramine, Clomipramine, Amoxapine</td>
<td>Sertraline, Fluoxetine, Paroxetine</td>
<td>Pargyline, Clorgyline</td>
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<tr>
<td>Antidepressants</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antihypertensives</td>
<td></td>
<td></td>
<td>Alpha-methyldopa, Reserpine, Verapamil</td>
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<td></td>
</tr>
<tr>
<td>Opiates</td>
<td></td>
<td></td>
<td></td>
<td>Morphine</td>
<td></td>
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<tr>
<td>H2 Antagonists</td>
<td></td>
<td></td>
<td></td>
<td>Cimetidine, Ranitidine</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td>Fenfluramine, Physostigmine</td>
<td>Chemotherapics</td>
</tr>
</tbody>
</table>
INFERTILITY: CONTINUED

Twice as likely to experience depression during treatment for infertility

CBT/IPT along with SSRI before infertility treatment reduces depressive symptoms during infertility

Hormonal Contraceptives
HORMONAL CONTRACEPTIVES AND MOOD

- No clear association between hormonal contraceptives and exacerbation or occurrence of depression
- Progestin only contraceptives may have negative effect on the mood (5-50%)
- Estrogen may have positive effect on depressive symptoms
- Women with h/o premenstrual mood instability are prone for contraceptive induced dysphoria
- Switching to alternative birth control measure would result in resolution of symptoms

Ref: Arch Gyn ob (2012) 286.231-236
HORMONAL CONTRACEPTIVES AND PSYCHOTROPICS

• Hormonal contraceptives may be rendered ineffective by concomitant use of psychotropics which induce their metabolism
• Ex: Carbamazepine, Oxcarbazepine, Topiramate, Modafanil, St. John’s wort
• Women should be encouraged to use contraceptives that have at least 50 mcg of estradiol when they are on the above said mood stabilizers
• Estrogen containing contraceptives might reduce lamotrigine’s level by 40 to 60 %

• Ref: Sabers et al. 2001, Doose et al, 2003
Pregnancy
DOCUMENTATION OF TREATMENT PLANNING IN WOMEN OF REPRODUCTIVE POTENTIAL

• Document the method of birth control during each visit
• Encourage avoidance of potential toxins (drugs, alcohol, tobacco, natural health remedies, caffeine)
• Emphasize need to take daily vitamins, Iron and Folic acid, weight reduction if need be, proper hydration, exercise
• Document any plan for future pregnancies over the next 2-3 years
RISK OF TREATING/NOT TREATING PREGNANT WOMEN
RISK OF TREATMENT TO THE FETUS

Congenital cardiac malformation (paroxetine), neural tube defects (valproic acid), PPH (some SSRI’s in the third trimester), Neonatal withdrawal syndrome (third trimester SSRI’s)

Prematurity, low birth weight
Long term neurodevelopmental abnormalities

Ref: sex specific and sexual function related psychopharmacology, Cambridge University Press, 2000
RISK OF TREATING/NOT TREATING PREGNANT WOMEN
RISKS OF NO TREATMENT TO THE MOTHER

- Poor prenatal care due to unmotivated mother
- Disrupted mother infant bonding
- Low birth weight, developmental delay in children of women with untreated depression
- Neglect of infant by depressed mother

- Relapse of major depression in the mother
- Poor self care
- Self harm
- Use of street drugs, alcohol, nicotine

Ref: sex specific and sexual function related psychopharmacology, Cambridge University Press, 2000
# Critical Period in Human Development

## Main Embryonic Period (in weeks)

<table>
<thead>
<tr>
<th>Week</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Period of dividing zygote, implantation, and bilaminar embryo</td>
</tr>
<tr>
<td>2</td>
<td>Neural tube defects (NTDs)</td>
</tr>
<tr>
<td>3</td>
<td>Embryonic disc</td>
</tr>
<tr>
<td>4</td>
<td>Morula</td>
</tr>
<tr>
<td>5</td>
<td>Amnion</td>
</tr>
<tr>
<td>6</td>
<td>Blastocyst</td>
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</tbody>
</table>

## Fetal Period (in weeks)

<table>
<thead>
<tr>
<th>Week</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Neural tube defects (NTDs)</td>
</tr>
<tr>
<td>8</td>
<td>Heart</td>
</tr>
<tr>
<td>9</td>
<td>Upper limb</td>
</tr>
<tr>
<td>10</td>
<td>Lower limb</td>
</tr>
<tr>
<td>11</td>
<td>Cleft lip</td>
</tr>
<tr>
<td>12</td>
<td>Upper lip</td>
</tr>
<tr>
<td>13</td>
<td>Low-set malformed ears and deafness</td>
</tr>
<tr>
<td>14</td>
<td>Ears</td>
</tr>
<tr>
<td>15</td>
<td>Microphthalmia, cataracts, glaucoma</td>
</tr>
<tr>
<td>16</td>
<td>Eyes</td>
</tr>
<tr>
<td>17</td>
<td>Enamel hypoplasia and staining</td>
</tr>
<tr>
<td>18</td>
<td>Tooth</td>
</tr>
<tr>
<td>19</td>
<td>Cleft palate</td>
</tr>
<tr>
<td>20</td>
<td>Palate</td>
</tr>
<tr>
<td>21</td>
<td>External genitalia</td>
</tr>
<tr>
<td>22</td>
<td>Internal genitalia</td>
</tr>
</tbody>
</table>

**Common site(s) of action of teratogens**
- Mauve denotes highly sensitive periods when major birth defects may be produced.

**Functional defects and minor anomalies**
- TA — Truncus arteriosus; ASD — Atrial septal defect; VSD — Ventricular septal defect.
COMMON CLINICAL DILEMMA IN THE REPRODUCTIVE YEARS

• Unplanned pregnancy
• Inadvertent conception during treatment with psychotropic
• Exacerbation of psychiatric symptoms in women with pre existing mental illness
• New onset of mental illness
PRECONCEPTION COUNSELING

- Meet with both patient and partner
- Clinical decision making before fetal exposure has occurred
- Emphasize avoidance of alcohol, nicotine and drugs
- Review psychiatric history
- Collaborate with OB/ Pediatrics
MANAGEMENT OF PSYCHIATRIC DISORDERS DURING PREGNANCY

• Goal of pharmacotherapy is not maximum control of symptoms but rather reduction of symptoms that may jeopardize the mother or the pregnancy
• Avoid combination therapies if possible, in view of their greater potential for teratogenicity
• Whenever possible psychotherapy and psychosocial measures should take precedence over pharmacotherapy or ECT
• All treatment recommendations should be discussed with patient/partner/OB, and all discussions documented.
• Discontinuing of mood stabilizers in pregnancy should be done only if its absolutely necessary
TREATMENT OF BIPOLAR ILLNESS DURING PREGNANCY

• Depends on the severity of the illness
• For mild bipolar disorder: gradual taper vs d/c mood stabilizer prior to pregnancy
• Consider restarting mood stabilizer during 2\textsuperscript{nd} or 3\textsuperscript{rd} trimester to avoid 1\textsuperscript{st} trimester exposure but to minimize risk of decompensation
• Lithium with or without antipsychotics may be a safe alternative mood stabilizers as the risk of Epstein's anomaly is relatively small
NON-PHARMACOLOGICAL INTERVENTIONS FOR PSYCHIATRIC DISORDERS DURING PREGNANCY

- Elimination of caffeine, nicotine and alcohol
- Adequate sleep
- Relaxation techniques
- IPT/CBT
- Support groups
- Reduction of psychosocial stressors
- Close communication with OB service
Postpartum mood disorder
Postpartum Depression: Clinical Predictors


Ref: Stowe et al
• Postpartum Blues
• Postpartum Depression
• Postpartum Psychosis
**DSM 5 CRITERIA FOR POSTPARTUM DEPRESSION**

Major depressive episode with a perinatal onset beginning in either pregnancy or within 1\textsuperscript{st} four weeks of postpartum
SYMPTOMS ASSOCIATED WITH PPD

- Psychomotor agitation and lethargy are more common in PPD than MDD
- Mood lability
- Preoccupation with infant wellbeing
- Anxiety
- Ruminative thoughts
- Panic attacks
OCD IN THE POSTPARTUM PERIOD

- Exacerbation in or after first pregnancy is associated with increased risk of exacerbation of OCD with subsequent pregnancies

Ref: Depress Anxiety, 2014 Dec;31(12):979-87. doi: 10.1002/da.22234. Epub 2014 Jan 1

Post partum OCD Speisman et al 2011
POSTPARTUM OCD VS POSTPARTUM PSYCHOSIS

- Obsessive thoughts are quite distressing in OCD (ego dystonic). Aggressive thoughts in postpartum psychosis are typically not distressing and do not result in fear (delusions are ego syntonic).
- In postpartum OCD they rarely harm the children, those with postpartum psychosis can actually harm the children.
POSTPARTUM OCD VS POSTPARTUM DEPRESSION

• Obsessions tend to trigger fear of consequences, where as depressive ruminations tend to be melancholic or contain negative cognitions
• Obsessions tend to have more bizarre and nonsensical content, where as depressive thoughts tend to focus on actual circumstances
• Obsessions are generally focused and specific, where as depressive rumination tend to drift from one topic to another
TREATMENT OF POSTPARTUM OCD

• Psychosocial Interventions
  Exposure and Response Prevention
  Cognitive restructuring

• Psychopharmacological/Combination Intervention
  SSRI’s
  SSRI’s + CBT
  SSRI with Antipsychotic augmentation (Quetiapine + SSRI)
TREATMENT OF POSTPARTUM DEPRESSION

• Reduction of psychosocial stressors
• Individual or group psychotherapy
• Antidepressants
• ECT
• Hospitalization if necessary
RISK/ BENEFIT ASSESSMENT FOR LACTATION

• **Impact of illness:**
  Untreated maternal mental illness has an adverse impact on mother infant attachment and later infant development

• **Impact of treatment:**
  All psychotropic medications studied to date are excreted in breast milk
  Long term effect on infant, exposed to psychotropic medications through breast milk is unknown
Lactation Safety Classification Schemes

- American Academy of Pediatrics
  - Usually compatible with breastfeeding
  - Unknown but of concern
  - Assoc’d with significant side effects & should be used with caution
  - Requires cessation of breastfeeding

- Thomas Hale, *Medications and Mothers’ Milk*
  - L1 - SAFEST
  - L2 - SAFER
  - L3 – MODERATELY SAFE
  - L4 – POSSIBLY HAZARDOUS
  - L5 – CONTRAINDIATED

Ref: Stowe et al
<table>
<thead>
<tr>
<th>Drug</th>
<th>Exposed Infants (N)</th>
<th>Hale Rating</th>
<th>American Academy of Pediatrics Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoxetine</td>
<td>202</td>
<td>L3/L2</td>
<td>Unknown but of concern</td>
</tr>
<tr>
<td>Sertraline</td>
<td>180</td>
<td>L2</td>
<td>Unknown but of concern</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>105</td>
<td>L2</td>
<td>Unknown but of concern</td>
</tr>
<tr>
<td>Citalopram</td>
<td>69</td>
<td>L3</td>
<td>Unknown but of concern</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>143</td>
<td>L2</td>
<td>Usually compatible with breastfeeding</td>
</tr>
<tr>
<td>Valproate</td>
<td>41</td>
<td>L2</td>
<td>Usually compatible with breastfeeding</td>
</tr>
<tr>
<td>Lamotrigine</td>
<td>42</td>
<td>L3</td>
<td>Unknown but of concern</td>
</tr>
<tr>
<td>Lithium</td>
<td>32</td>
<td>L4</td>
<td>Significant side effects; should be given with caution</td>
</tr>
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<td>Olanzapine</td>
<td>16</td>
<td>L2</td>
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<tr>
<td>Risperidone</td>
<td>3</td>
<td>L3</td>
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</tr>
<tr>
<td>Quetiapine</td>
<td>1</td>
<td>L4</td>
<td></td>
</tr>
</tbody>
</table>

Ref: Stowe et al
Perimenopause
PERIMENOPAUSE

Menopause is permanent cessation of menstruation associated with increase in FSH and decrease in ovarian hormone Inhibin

Perimenopause occurs 5-7 years before menopause, is the interval between regular ovulatory cycles and complete cessation of menstruation

Women who go through lengthy Perimenopause are at risk for depressive symptoms and this risk decreased after menopause

RISK FACTORS FOR MOOD DISORDERS DURING PERIMENOPAUSE

- H/o depressed mood or depression including h/o postpartum depression or Premenstrual syndrome
- Stressful life events
- Marital concerns
- Unhealthy life style (smoking, lack of exercise)
- Lower educational level
- Comorbidity, poorer health rating
- Negative attitude to ageing and menopause
- Vasomotor and other physical symptoms
- Pre menstrual syndrome symptoms amongst early menopausal patients (36 to 44 years)
- Early natural menopause (before 40 years of age)
- Longer menopausal transition (at least 27 months)
- Ethnicity (less prevalent in Japanese and Chinese)
- Surgical menopause

Ref: Feld J, Halbreich U, Karkun S, CNS spectrum Vol 10, No 6 2005
FIGURE 9.
The symptoms of depression and perimenopause often overlap due to similar neurobiological links between these two conditions.

Depression or Perimenopause?

Depression
- Depressed mood
- Anhedonia
- Worthlessness/guilt
- Agitation/retardation
- Suicidal ideation

Preimenopause/menopause
- Low energy
- Poor concentration
- Insomnia
- Weight gain
- Decreased libido
- Hot flashes
- Sweating
- Vaginal dryness


Antidepressants: SSRI, SNRI
Physical activity
Cognitive Behavioral Therapy
Interpersonal Therapy

Ref: Stahl 2005, Jenkins 2008
ESTROGEN IN PERIMENOPAUSAL DEPRESSION

- Studies are inconsistent
- Women who most likely will benefit from estrogen are perimenopausal, have minor depression as opposed to menopausal women with major depression and in women with partial response to antidepressant, estrogen may be used as an adjuvant
- Not FDA approved

Post menopause
• Post menopausal stage is significant for estrogen deficiency
• Risk for depression is lower than in Perimenopause
• SSRI’s may not be effective in postmenopausal women unless they are on estrogen replacement therapy
• If they continue to have vasomotor symptoms SNRI’s may be considered

• Ref: Thase et al.2005, Rasgon et al, 2007
DEPRESSION IN BREAST CANCER

• 1 of 9 women have breast cancer in their lifetime
• Women with breast cancer experience impaired quality of life
• Stress of receiving a diagnosis, disfigurement, treatment can all lead to depression
• Tamoxifen is a Selective estrogen receptor modulator used in women with breast cancer.
• Avoid strong CYP2D6 inhibitors like paroxetine, fluoxetine, bupropion, Cymbalta and moderate inhibitors like Celera, sertraline and doxepin to treat depression in women receiving tamoxifen
• Weak inhibitors like venlafaxine and desvenlafaxine may be used
Questions