

# SCHIZOPHRENIA, BIPOLAR DISORDER AND OTHER PSYCHIATRIC ILLNESSES IN PREGNANCY

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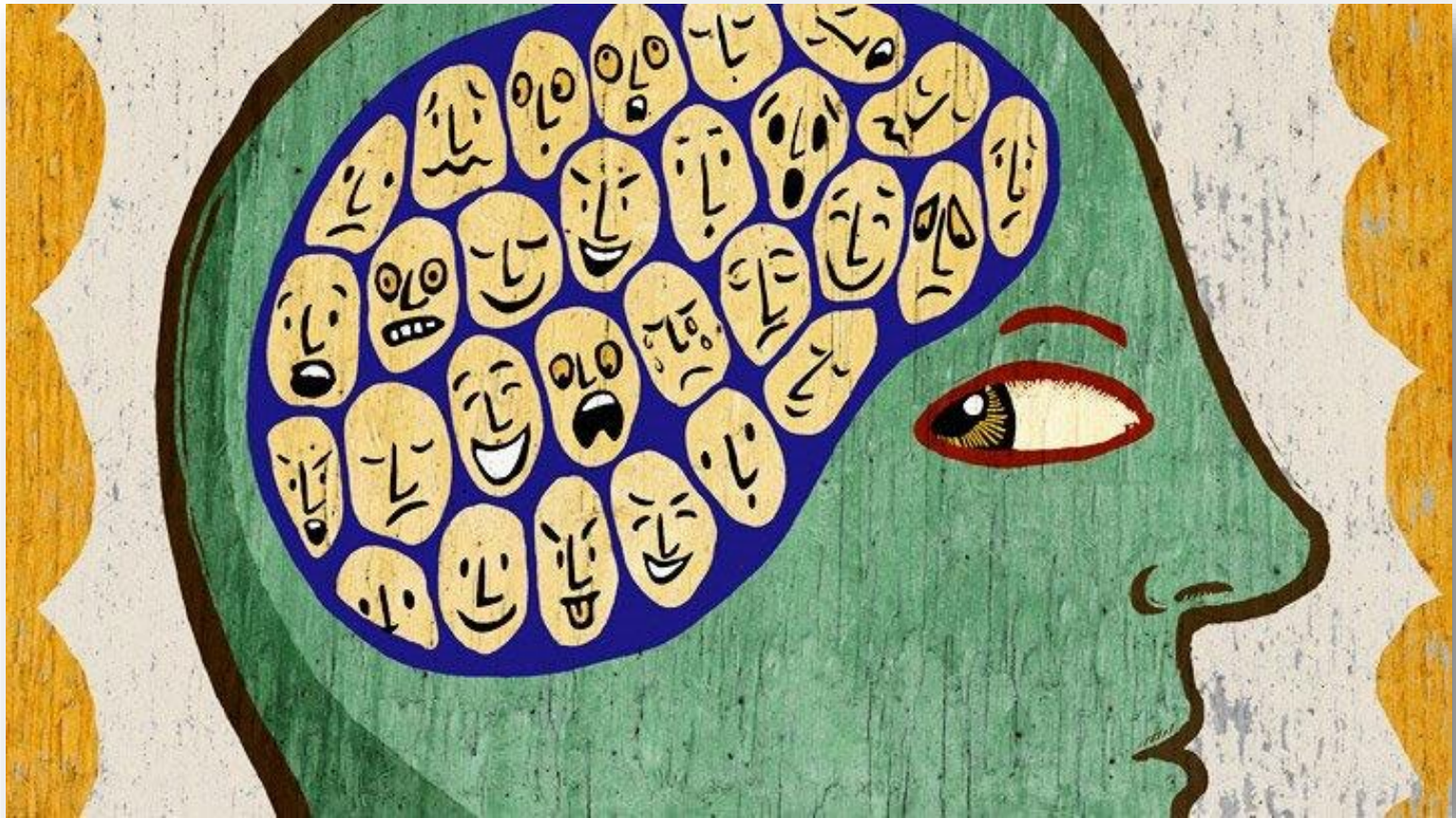
# DISCLOSURES

I have no disclosures

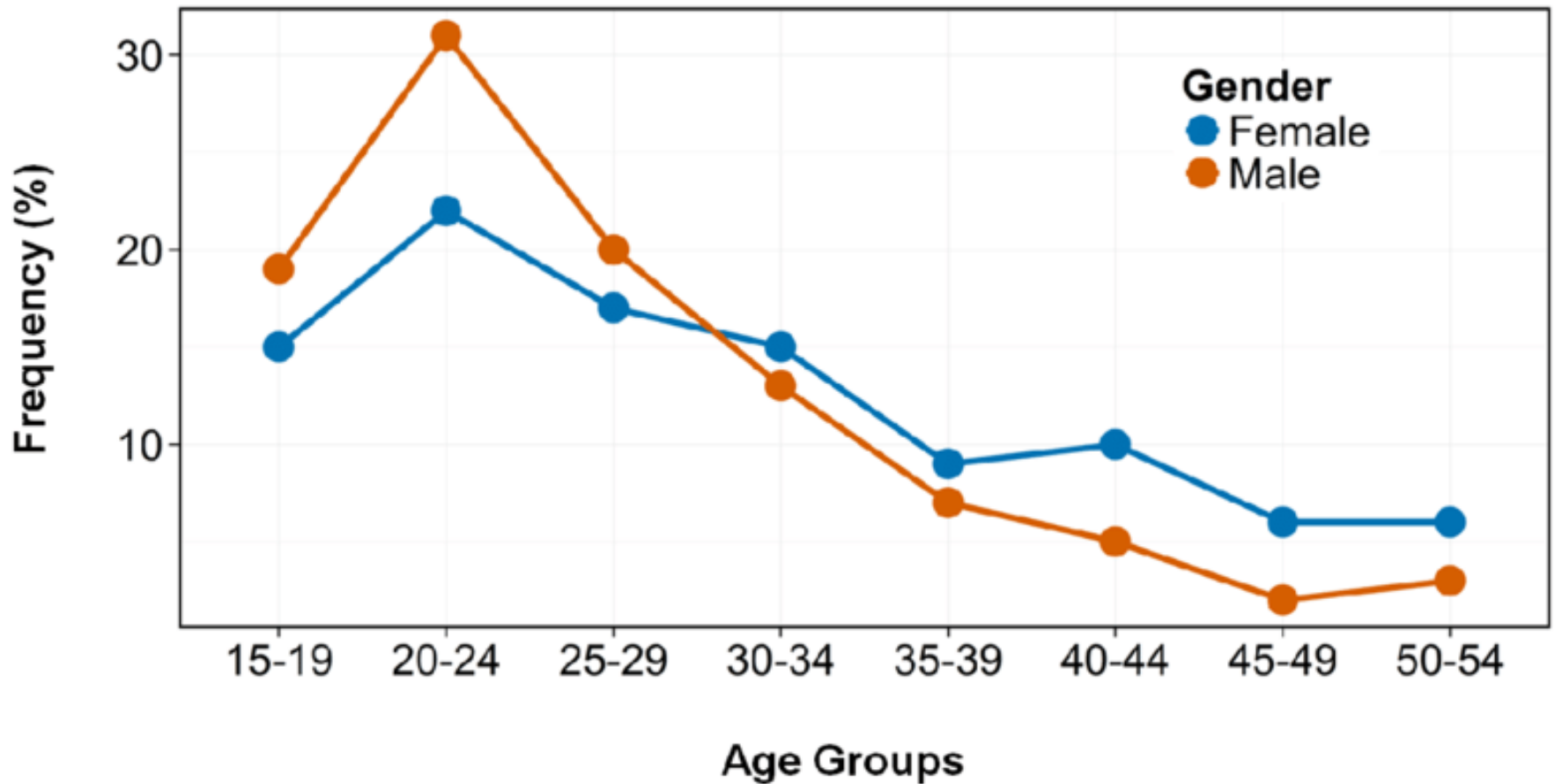
# OBJECTIVES

- Describe the clinical presentation of schizophrenia, bipolar disorder, OCD, ADHD, and eating disorders in pregnancy.
- Discuss how to manage these disorders during pregnancy.
- Explain the course of these illnesses in the postpartum period.

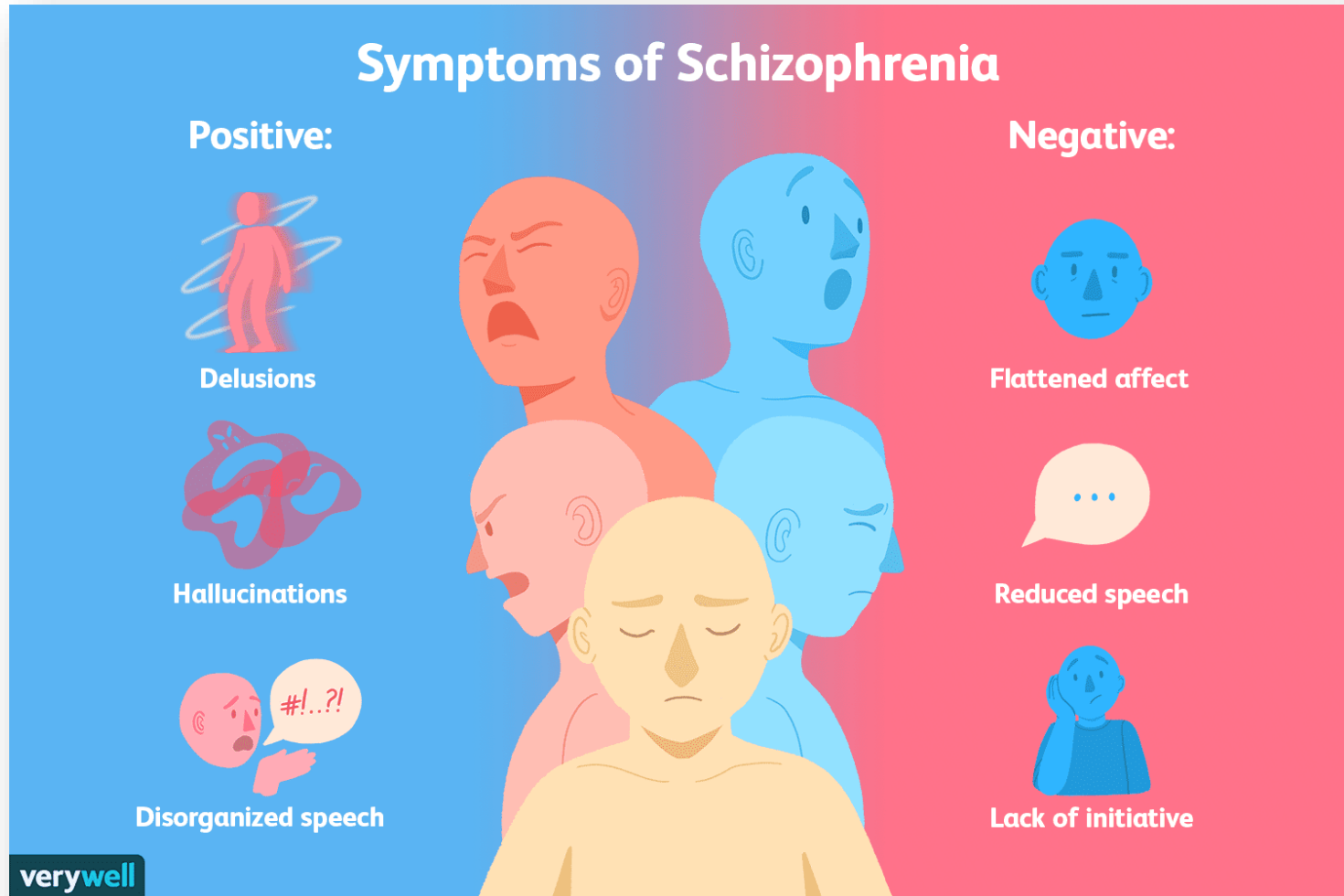
# SCHIZOPHRENIA



# EPIDEMIOLOGY



# CLINICAL PRESENTATION



# PREGNANCY

- New onset of Schizophrenia in pregnancy is *rare*.
- Women with Schizophrenia:
  - Greater likelihood of *rape*
  - More *unplanned/unwanted* pregnancies
  - Less knowledge about family planning
  - Less prenatal care



# SYMPTOMS IN PREGNANCY

- Psychotic episodes
- *Delusions about the fetus* being evil
- Stabbing self in abdomen
- Psychotic *denial* of pregnancy
- Poor self and antenatal care
- Inability to recognize signs and symptoms of labor



# MANAGEMENT

## Psychosocial interventions

- Psychoeducation about pregnancy
- Review ultrasound with patient to reduce psychotic interpretation
- Parenting training
- Psychotherapy

# MANAGEMENT

## Pharmacological interventions

- *Antipsychotic medications* are mainstay
- Monotherapy is preferred
- Second generation antipsychotics - more common
- ECT for acute affective psychotic episodes - safe for fetus
- Avoid restraints for agitated patients to avoid compression of the vena cava.

# ANTIPSYCHOTICS

## First Generation (Typical)

- Haloperidol
- Chlorpromazine
- Prochlorperazine
- Perphenazine
- Trifluoperazine

## Second Generation (Atypical)

- Aripiprazole
- Quetiapine
- Risperidone
- Clozapine
- Olanzapine
- Ziprasidone

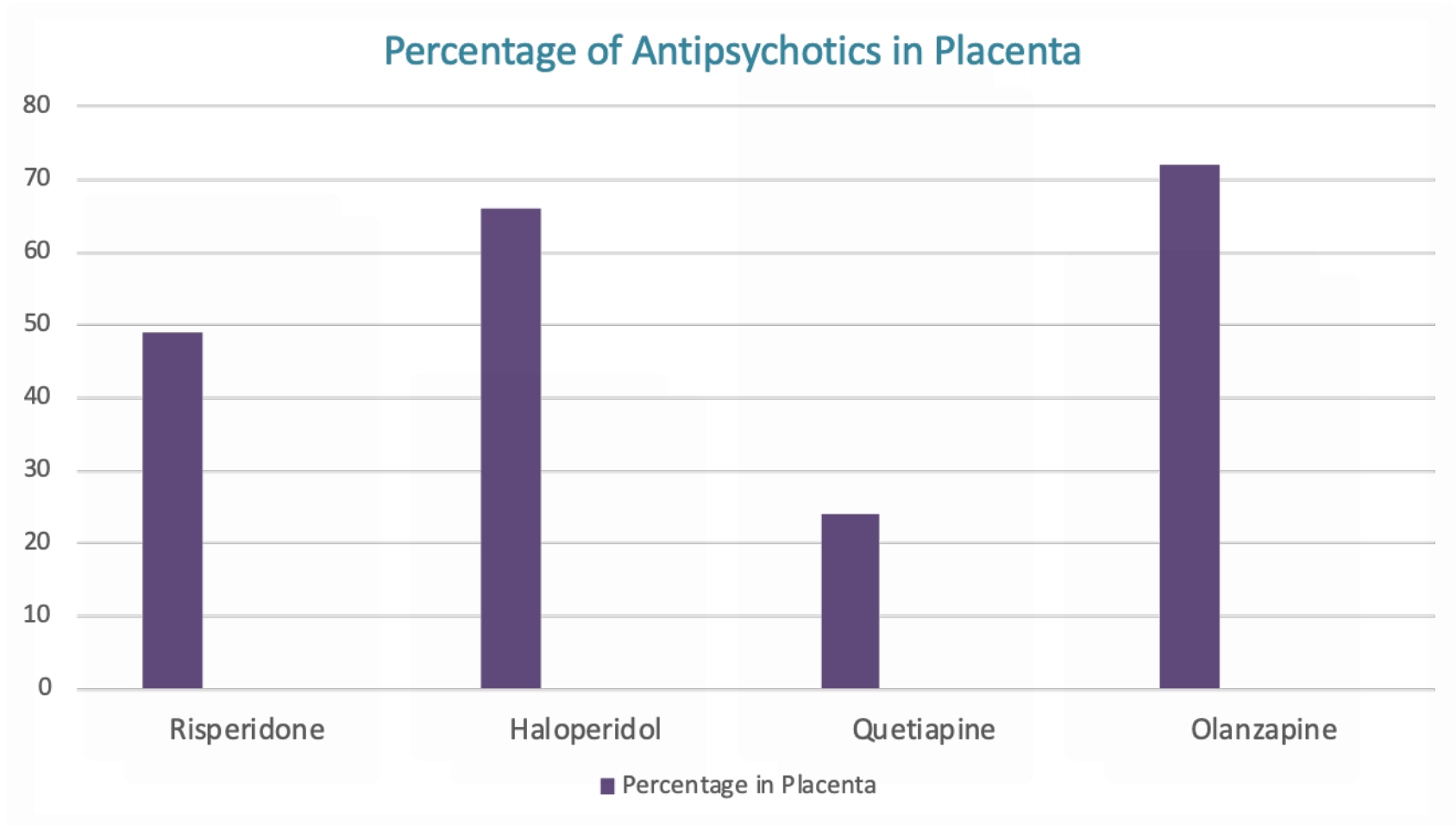
# FIRST GENERATION ANTIPSYCHOTICS

- Some studies - spontaneous preterm birth
- No increase in perinatal mortality
- No increase in birth defects
- No adverse behavioral, cognitive, emotional adverse effects

# SECOND GENERATION ANTIPSYCHOTICS

- More frequently used than first generation due to *fewer side effects*
- No increase in stillbirths or teratogenic effects
- Postpartum weight of women greater than controls

# PLACENTAL PASSAGE OF ANTIPSYCHOTICS



# POSTNATAL EFFECTS OF ANTIPSYCHOTICS

FDA's Adverse Event Reporting System database identified 69 cases of neonatal EPS (through 2008) or withdrawal

- Agitation
- Hypertonia
- Hypotonia
- Tremor
- Somnolence
- Respiratory distress
- Feeding disorder



# OBSTETRIC COMPLICATIONS IN SCHIZOPHRENIA

Maternal Complications	Fetal Complications
Three times risk of diabetes	Abnormally low or high birth weight
Chronic hypertension	Intrauterine growth restriction
Placental abruption	Preterm birth
Septic shock	
Require labor induction	
Thromboembolic disease	
More than five times risk of mortality one year after giving birth	

Vigod et al: Maternal and newborn outcomes among women with schizophrenia: a retrospective population-based cohort study. BJOG. 2014 Apr;121(5):566-74.

# COMPETENCY ISSUES

- Psychiatrists may be called to assess for competency to parent an infant.
- Delusions may affect behavior during parenting.
- Unable to engage and stimulate baby.
- Unable to express affect to baby.
- Unable to respond to baby's needs.
- *Command hallucinations* to harm the baby.

# BIPOLAR DISORDER



# EPIDEMIOLOGY

- Lifetime prevalence - 1 to 3%
- Men = Women
- Mean onset 18-20 years
- Onset in women - during *childbearing years*
- In pregnancy, new onset of bipolar disorder is rare

# CLINICAL PRESENTATION

- Episodes of *mania, hypomania, and major depression.*

Bipolar I Disorder	Bipolar II Disorder
At least one Manic episode + Depressive episodes +/- Hypomania	At least one Hypomanic episode + Depressive episodes

## HYPOMANIA



## MANIA



# CLINICAL FEATURES

Mania	Hypomania	Depression
<p>Elevated/irritable mood at least one week or if hospitalization required and:</p> <ul style="list-style-type: none"> <li>• Grandiosity</li> <li>• Decreased sleep</li> <li>• Pressured speech</li> <li>• Racing thoughts</li> <li>• Distractibility</li> <li>• Increased goal directed activity</li> <li>• Reckless behavior</li> </ul>	<p>Elevated/ irritable mood at least four consecutive days and 3+:</p> <ul style="list-style-type: none"> <li>• Grandiosity</li> <li>• Decreased sleep</li> <li>• Pressured speech</li> <li>• Racing thoughts</li> <li>• Distractibility</li> <li>• Increased goal directed activity</li> <li>• Reckless behavior</li> </ul> <p>Unequivocal change in functioning</p>	<p>&gt;5 of 9 for two weeks:</p> <ul style="list-style-type: none"> <li>• Depressed mood</li> <li>• Anhedonia</li> <li>• Weight changes</li> <li>• Sleep disturbances</li> <li>• Psychomotor changes</li> <li>• Fatigue</li> <li>• Guilt/worthlessness</li> <li>• Poor concentration</li> <li>• Suicidal thoughts</li> </ul>



# PREGNANCY

- High risk of relapse during pregnancy
- Overall risk of mood episode in pregnancy - 23%
- Major depressive episodes – more common
- Manic, hypomanic and mixed episodes are all prevalent
- Younger women – higher risk
- History of previous postpartum episodes - greatest risk of relapse

# PRECONCEPTION

Discuss with patients:

- Risks of *fetal exposure*
- *Risks of avoiding* preconception pharmacotherapy
- *Maintaining* existing medications
- *Switching* medications to avoid teratogenicity
- Consider medications starting in *second trimester*
- *Discontinue* medications prior to conception and remain medication free

# UNTREATED BIPOLAR DISORDER

- At increased risk of recurrent mood episodes
- Increased risky behavior due to mania
- Decreased prenatal care
- Increased use of addictive drugs

# MANAGEMENT

- Goal is to *maintain euthymia* during pregnancy and postpartum
- Psychotherapy in addition to pharmacotherapy
- Pharmacotherapy for mania, depressive symptoms and hypomania
- Relapse rates are high with discontinuation of medications
- Never abruptly stop medication, if unplanned pregnancy – *except valproate*

# MEDICATION MANAGEMENT

- Lithium
- Antiepileptic mood stabilizers
- Atypical antipsychotics

# LAMOTRIGINE

- Safe, efficacious
- Measure serum concentration preconception and during pregnancy
- Increased drug clearance during pregnancy
- Increase dose by 20-25% from baseline
- After delivery, clearance decreases – decrease dose

# ANTIPSYCHOTICS

- Efficacious for mood stabilization
- Hyperglycemia with second generation antipsychotics
- Obesity, hypertension



# LITHIUM

- For patients maintained on lithium and unstable disease
- *Ebstein's anomaly*
- Screen with high resolution USG and fetal echo
- Two-three divided doses
- Controlled release form to avoid peak levels
- Levels every 2-4 weeks, weekly after 36 weeks
- Withhold 1-2 days prior to delivery or onset of labor
- *Monitor newborn* for signs of lithium toxicity for up to 10days after delivery

# VALPROATE/CARBAMAZEPINE

- *Teratogenic*
- Developmental delay and lower IQ scores
- *Switch* 3-6 months prior to conception
- Maintain *ONLY* if poor response to all other medications
- High dose folic acid 4-5mg/day

# ECT

- No response to pharmacotherapy
- Becoming acutely ill

# POSTPARTUM COURSE

- Risk of relapse – 35%
- Most postpartum recurrences - first 4 weeks of delivery
- Risk of suicide

# POSTPARTUM PSYCHOSIS

- Extreme agitation, delirium, confusion, sleeplessness, and hallucinations/delusions.
- 3-14 days postpartum
- 90% episodes within 4 weeks of delivery
- Incidence - 0.1-0.2%

## Seen with:

- Bipolar disorder (20-40%)
- Can also occur with schizophrenia, schizoaffective disorder (20%)
- Major depression with psychosis
- Treat as a **medical emergency**

# OBSESSIVE COMPULSIVE DISORDER



# EPIDEMIOLOGY

## Prevalence

- General population – 1.08%
- Pregnancy – 2.07%
- Postpartum – 2.43%
- *Increased risk* of onset and exacerbation during pregnancy

# DIAGNOSIS

- Presence of obsessions, compulsions, or both
- Obsessions: recurrent persistent thoughts, urges that are intrusive and unwanted.
- Attempts to neutralize/suppress obsessions through actions (compulsions)
- Compulsions: repetitive behaviors or mental acts in response to an obsession, or according to rule that must be applied rigidly.
- The behaviors prevent/reduce anxiety and distress



# CLINICAL PRESENTATION

## Obsessions

- Focus on pregnancy and baby
- Fears of fetal death
- Fear of infections and infecting the baby
- Usually insight is preserved, recognizing obsessions as inappropriate and intrusive.

## Compulsions

- Repeated requests for ultrasounds
- Avoidance of touching the baby
- Changing/cleaning baby repetitively

# MANAGEMENT

- During pregnancy and postpartum frequently go *undetected and untreated*
- Difficult to treat
- Partial responses to treatment are common
- *Relapses* are common
- Ensure *safety* of mother and baby
- Cognitive behavioral therapy or
- Selective serotonin reuptake inhibitors (SSRIs)

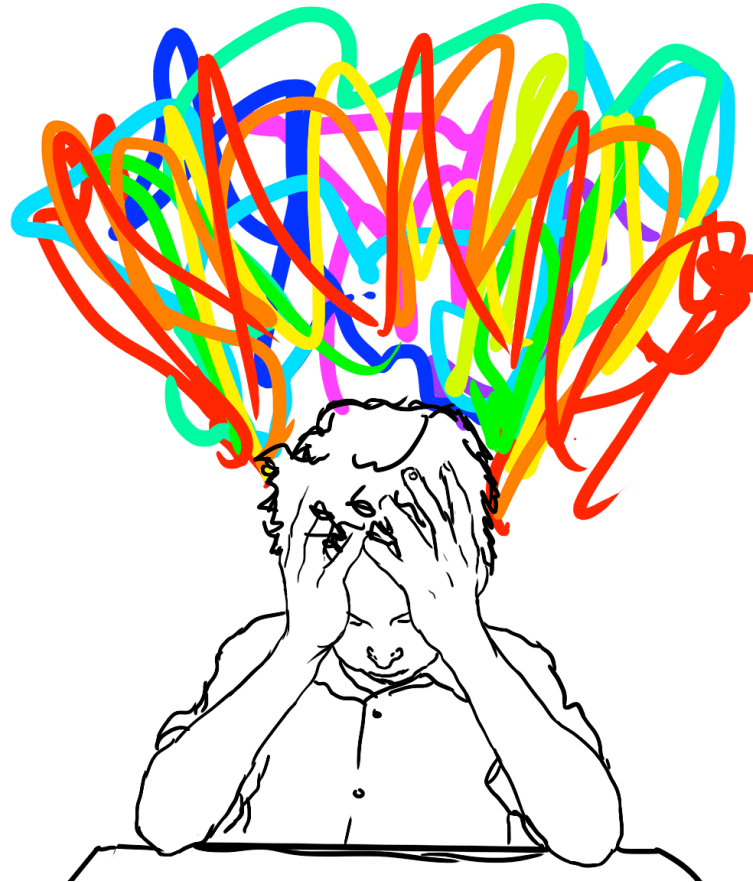
# MANAGEMENT

- Antidepressant medications (*SSRIs*)
- Augmentation with antipsychotics for refractory cases
- Carefully weigh risks and benefits of treatment
- Cognitive behavioral therapy

# POSTPARTUM COURSE

- Not well studied
- Mixed outcomes in small sample studies

# ADHD



# EPIDEMIOLOGY

- 4.4% among 18-44 year olds in the US
- Often co-occurs with other psychiatric diagnoses

# DIAGNOSIS

Inattention	Hyperactivity/Impulsivity
<p>&gt;6 for at least 6 months</p> <ul style="list-style-type: none"><li>• Careless mistakes</li><li>• Difficulty focusing in class/ tasks</li><li>• Does not seem to listen</li><li>• Difficulty following through on instructions</li><li>• Difficulty organizing tasks</li><li>• Avoids, reluctant to engage in activities requiring sustained mental effort</li><li>• Loses things necessary for tasks</li><li>• Easily distracted</li><li>• Forgetful in daily activities</li></ul>	<p>&gt;6 for at least 6 months</p> <ul style="list-style-type: none"><li>• Fidgets/squirms often</li><li>• Leaves seat when remaining seated is expected</li><li>• Runs about/restless</li><li>• Unable to engage in activities quietly</li><li>• “on the go”</li><li>• Talks excessively</li><li>• Cannot wait for turn in conversation</li><li>• Difficulty waiting their turn</li><li>• Interrupts others</li></ul>

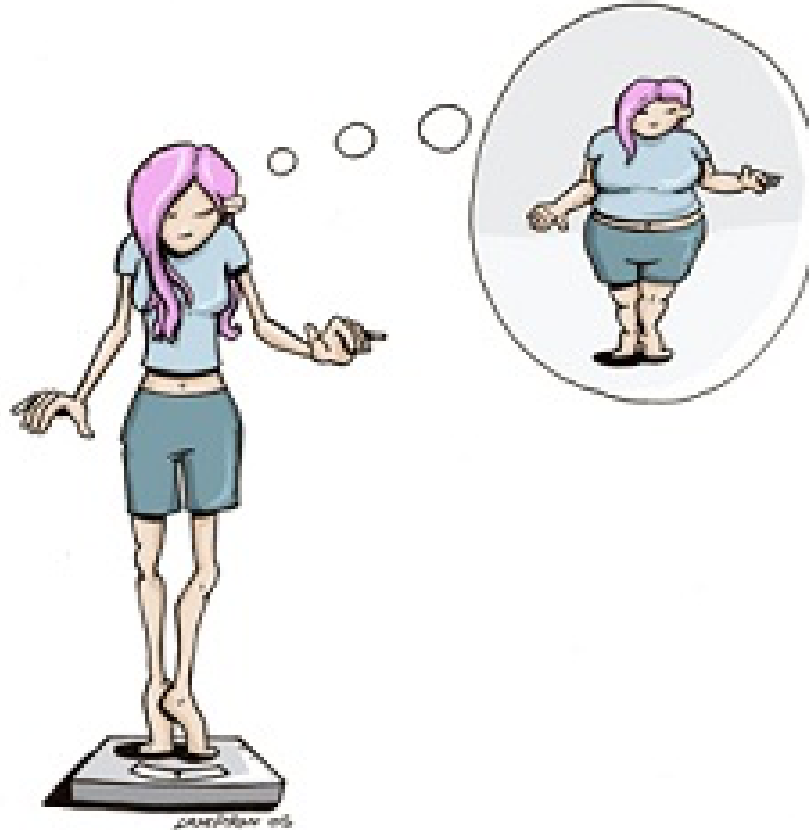
- CDC website: *“The use of ADHD medication is on the rise in women of reproductive age.”*



# MANAGEMENT

- Mild to moderate ADHD – discontinue medication
- Severe symptoms, interfere with daily functioning – continue pharmacologic treatment
- Limited data on medications
- *Methylphenidate* – small increase in cardiac malformations
- No cardiac malformations with *amphetamines*

# EATING DISORDERS



# EPIDEMIOLOGY

- Anorexia nervosa – 0.6%,
  - 0.1-0.3% in pregnancy
  - F:M – 10:1
- Binge eating disorder – 2.6%,
  - 3% in pregnancy
- Bulimia nervosa – 1%,
  - 0.2% in pregnancy
  - F:M – 3:1

# CLINICAL FEATURES

Anorexia Nervosa	Bulimia Nervosa	Binge Eating Disorder
<ul style="list-style-type: none"> <li>• Restriction of intake</li> <li>• Significantly low body weight</li> <li>• Intense fear of weight gain</li> <li>• Disturbance in the way one's body weight or shape is experienced</li> </ul> <ul style="list-style-type: none"> <li>- restrictive type</li> <li>- binge eating/purging type</li> </ul>	<ul style="list-style-type: none"> <li>• Recurrent episodes of binge eating – eating larger amounts in a discrete period of time</li> <li>• Lack of control over eating</li> <li>• Recurrent inappropriate compensatory behavior</li> <li>• At least once a week for 3 months</li> <li>• Self evaluation is unduly influenced by body shape and weight</li> </ul>	<p>Episodes of binge eating Binge eating episodes (at least 3)</p> <ul style="list-style-type: none"> <li>• Eating more rapidly</li> <li>• Eating until uncomfortably full</li> <li>• Eating large amounts of food when not hungry</li> <li>• Eating alone because of embarrassment</li> <li>• Feeling disgusted with oneself for overeating</li> </ul> <p>At least one episode per week for 3 months</p>

# ANOREXIA IN PREGNANCY

- *Unplanned* pregnancies are common in anorexia.
- Induced abortion also common.
- Changes in body shape during pregnancy are distressing
- Baby with *low birth weight*
- Higher rates of *depression* in pregnancy and postpartum

# BULIMIA IN PREGNANCY

- Gestational weight gain is excessive
- Total calorie intake higher per day than compared with controls
- *Chemical imbalances*, dehydration and cardiac arrhythmias due to purging

# BINGE EATING DISORDER IN PREGNANCY

- Higher weight gain during pregnancy
- Risk of hypertension
- Gestational diabetes mellitus

# OUTCOMES

Anorexia Nervosa	Bulimia nervosa	Binge Eating Disorder
<ul style="list-style-type: none"><li>• Antepartum hemorrhage</li><li>• Low birth weight</li><li>• Small for gestational age</li><li>• Miscarriage</li><li>• Preeclampsia</li><li>• Preterm delivery</li><li>• Caesarean delivery</li><li>• Small for gestational age</li><li>• Large for gestational age</li></ul>	<ul style="list-style-type: none"><li>• Gestational weight gain is excessive</li><li>• Increased miscarriages</li><li>• Preeclampsia</li><li>• Preterm delivery</li><li>• Caesarean delivery</li><li>• Small for gestational age</li><li>• Large for gestational age</li></ul>	<ul style="list-style-type: none"><li>• Increased risk of miscarriages</li><li>• Increased risk for preeclampsia</li><li>• preterm delivery</li><li>• Caesarean delivery</li><li>• Small for gestational age</li><li>• Large for gestational age</li></ul>



# MANAGEMENT

- *Prepregnancy counseling* – offer contraception
- Postpone pregnancy until disorder is stable

## During pregnancy:

- Multidisciplinary team management
- Closely monitor diet
- Weigh patients in hospital gown
- Discuss nutritional needs for the fetus
- *Treat comorbid psychopathology* – depression and anxiety (antenatal and postnatal)
- Pharmacotherapy with psychotherapy

# POSTPARTUM COURSE

- Continue treatment after delivery
- *Relapse* in postpartum period is common
- *Postpartum depression* is frequent

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