AGENDA

- Depression
- Anxiety
- Bipolar disorders
- ADHD
- Changes from DSM IV to DSM V
DSM-IV Multiaxial Assessment

- **Axis I**: Clinical Syndromes (Depression, Anxiety, OCD, Bipolar)
- **Axis II**: Developmental and Personality Disorders (includes Autism and Mental Retardation)
- **Axis III**: General Medical Conditions (that play a role in the development, exacerbation, or continuance of Axis I and II)
- **Axis IV**: Psychosocial and Environmental Problems (that impact Axis I and II)
- **Axis V**: Global Assessment of Functioning (scale 0-100; less than 50 often considered significant impairment)

**ELIMINATED FROM DSM V!!!!!!!**
DEPRESSIVE DISORDERS

- Include Major Depressive Disorder
- Approximately 5% of population
- Female to male 2:1
Major Depressive Disorder

5 of the following for at least 2 weeks duration, of which one is Depressed mood or Loss of interest:

- *Depressed mood
- Sleep disturbance
- *Loss of Interest (Anhedonia)
- Guilt/worthlessness
- Fatigue/loss of Energy
- Difficulty Concentrating
- Appetite/Change in weight
- Psychomotor agitation/retardation
- Thoughts of death or Suicide (with or without plan)
Antidepressants

All antidepressants have similar efficacy, but differ based upon side effects

-TCA’s (Imipramine, Amitriptyline): Anticholinergic, QT prolongation.

-Mirtazapine causes weight gain and somnolence.

-SSRI’s: Sexual side effects, Weight gain (Paroxetine the worst), QT prolongation (Citalopram).

-Less side effects with SNRI’s (Venlafaxine, Duloxetine) and Bupropion. Pain reduction with Duloxetine in fibromyalgia.
SSRI’s

- Citalopram (Celexa, Cipramil)
- Escitalopram (Lexapro, Cipralex)
- Paroxetine (Paxil, Seroxat)
- Fluoxetine (Prozac)
- Fluvoxamine (Luvox, Faverin)
- Sertraline (Zoloft, Lustral)
Antidepressants

- SSRI first line therapy in most situations
- Black Box Warning: Increased risk of suicidal thoughts or behaviors in children, adolescents, and young adults on SSRI’s
- Fluoxetine only SSRI that is FDA approved in children/adolescents (ages 8 and older)
- Push the dose prior to switching to different agent
- Can augment with Bupropion, Liothyronine (T3,Cytomel), Lithium, Buspirone, Aripiprazole (Abilify).
  (AVOID BENZODIAZAPINES and can use hydroxazine)
  (Treat underlying cause…untreated OSA, thyroid disorder, etc)
Antidepressants
Other treatments

- Cognitive behavioral therapy
- Alternatively spiritual or pastoral counseling
- Electroconvulsive therapy is an alternative in refractory depression (memory loss is usually short term)
Persistent Depressive Disorder

- Combines what was formerly termed “Dysthymia” plus Chronic Major Depression
- Depressed mood is present for most of the day, more days than not and depression has been present for at least two years without a two month hiatus.
- Persistent and pervasive
Post-Partum Depression

- 70% of new moms have “Baby Blues”
  - Mild symptoms that resolve within 10 days
- 10-20% have Post-Partum Depression
- 40% recurrence rate with subsequent pregnancies
- Lots of morbidity for mom and baby
- Screen at post-partum check and at 2 month WCC
- Family physician often in best position to screen, diagnose, and treat
Screening for Depression

- In most patient types, screening is recommended IF adequate resources exist to deal with further diagnosis and treatment.
- PHQ-9 - EMR
- SIGECAPS
  - Depressed Mood with-
    - Sleep decreased (Insomnia with 2-4 am awakening)
    - Interest decreased in activities (anhedonia)
    - Guilt or worthlessness (Not a major criteria)
    - Energy decreased
    - Concentration difficulties
    - Appetite disturbance or weight loss
    - Psychomotor retardation/agitation
    - Suicidal thoughts
Anxiety Disorders

- Panic Disorder: Recurrent panic attacks during which four of the following symptoms begin abruptly and reach a peak within 10 minutes in the presence of intense fear:
  - Palpitations
  - Sweating
  - Trembling/shaking
  - SOB
  - Choking sensation
  - Chest pain/discomfort
Panic Disorder

- Nausea
- Dizziness
- Derealization/Depersonalization
- Fear of losing control or going crazy
- Fear of dying
- Paresthesia
- Chills/Hot flushes
Panic Disorder

Treatment:
- SSRI’s
- prn Benzodiazepines
- Prn hydroxyzine
- Cognitive behavioral therapy
Anxiety Disorders

- Generalized Anxiety Disorder
  - Unrealistic or excessive anxiety or worry about two or more life circumstances for at least six months
  - Most common anxiety disorder
  - Medications (Buspirone, Antidepressants, prn)
  - Benzodiazepines) + Cognitive behavioral therapy
Bipolar Disorder

- 2-5% of population
- Bipolar I
  - One or more Manic episodes
  - Commonly accompanied by a history of at least one major depressive episode
- Bipolar II
  - One or more major depressive episodes with at least one hypomanic episodes
Bipolar Disorder

- Cyclothymia
  - Hypomania and depression (below criteria for MDD)

- Treatment
  - Lithium
  - Anticonvulsants
  - Valproic Acid, Carbamazepine, Lamotrigine, Oxcarbazepine
  - Atypical antipsychotics
  - Olanzapine, Quetiapine, Risperidone, Ziprasidone, Aripiprazole
Personality Disorders

- An enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual’s culture. This pattern is manifested in two (or more) of the following areas:
  - cognition (i.e., ways of perceiving and interpreting self, other people, and events)
  - affectivity (i.e., the range, intensity, lability, and appropriateness of emotional response)
  - interpersonal functioning
  - impulse control
Personality Disorders

- The enduring pattern is inflexible and pervasive across a broad range of personal and social situations.
- The enduring pattern leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning.
<table>
<thead>
<tr>
<th>Cluster A</th>
<th>Cluster B</th>
<th>Cluster C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ODD) Paranoid</td>
<td>(ERRATIC) Antisocial</td>
<td>(ANXIOUS) OCPD</td>
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<tr>
<td>Schizoid</td>
<td>Borderline</td>
<td>Dependent</td>
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<tr>
<td>Schizotypal</td>
<td>Histrionic</td>
<td>Avoidant</td>
</tr>
<tr>
<td></td>
<td>Narcissistic</td>
<td></td>
</tr>
</tbody>
</table>
Personality Disorders

- Schizoid vs. Schizotypal
  - Schizoid: Solitary, indifferent to praise/criticism, low functioning, premorbid condition to schizophrenia?
  - Schizotypal: Magical thinking, ideas of reference, eccentric behavior and appearance.

- Antisocial
  - Cruel to animals as child, Unlawful activity as adolescent/adult, Can’t hold a job
  - Irresponsible, Deceitful, Unremorseful

- Histrionic
  - Exaggerate expression of emotions, uses superlatives, attention seeking

- Borderline
  - “Unstable”
Personality Disorders

- In general, treatment is not effective and consists of behavioral modification, symptomatic treatments, environmental modification.
ADHD

- 2-16% of school age children
- Child must display 6 of 9 symptoms of inattention, or 6 of 9 symptoms of impulsivity/hyperactivity
- Must be present for more than 6 months
- Must begin before age 12*
- Must occur in more than 1 setting (home and school)
ADHD

- Inattention
  - Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
  - Often has difficulty sustaining attention to tasks or play activities
  - Often does not listen when spoken to directly
  - Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace
  - Often has difficulty organizing tasks and activities
ADHD

- Inactivity
- Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (homework)
- Often loses things necessary for tasks or activities
- Is often easily distracted by extraneous stimuli
- Is often forgetful in daily activities
ADHD

- Hyperactivity
  - Often fidgets with hands or feet, or squirms in seat
  - Often leaves seat in classroom or in other situations in which remaining seated is expected
  - Often runs about or climbs excessively in situation in which it is inappropriate
  - Often has difficulty playing or engaging in leisure activities quietly
  - Is often “on the go” or acts as if “driven by a motor”
  - Often talks excessively
ADHD

- Impulsivity
  - Often blurts out answers before questions have been completed
  - Often has difficulty awaiting turn
  - Often interrupts or intrudes on others (butts in on conversations)
ADHD

- Diagnose with Rating Scales, filled out by parents and teachers (Connors, Vanderbilt, etc.)
- Treat with medications
  - Stimulants first line
  - Atomoxetine (Strattera) second line
- Medication + Behavioral therapy = Medication alone
  - But with combination therapy may be able to use lower dose of medication
Adult ADHD

- Childhood ADHD persists into adulthood 30% of the time
- Diagnostic criteria are the same, except only need 5 of 9 symptoms
- Also use Rating Scales, but ones that are unique for adult ADHD (i.e. Wender Utah Rating Scale)
- Stimulants and Atomoxetine (Strattera) first line
- Antidepressants second line
A 38-year-old white female who works as an secretary for a trucking company complains of fatigue, low energy, and a depressed mood. She states that she has felt this way for most of her life. She feels depressed most of the time but denies any recent stresses or significant losses in her life. She reports that she is doing well at work and that she recently received a bonus. She has no interests other than her job and states that she has no happy thoughts and that her self-esteem is very low. She is married and reports her husband drinks. She denies suicidal thoughts but states that she does not care if she dies. She has had no sleep disturbance, change in appetite, or difficulty concentrating. She is taking no medications and denies substance abuse. Results of a recent medical evaluation required by her employer were all normal, including a physical examination, EKG, multiple chemical profile, CBC, urinalysis, and a TSH level. Which of the following is the most likely diagnosis?

A. Major Depression
B. Persistent Depressive Disorder
C. Bipolar Disorder
D. Cyclothymia
E. Adjustment disorder with depressed mood
A 34-year-old white female who works as an engineer for a major corporation complains of fatigue, low energy, and a depressed mood. She states that she has felt this way for most of her life. She feels depressed most of the time but denies any recent stresses or significant losses in her life. She reports that she is doing well at work and that she recently received a promotion. She has no interests other than her job and states that she has no happy thoughts and that her self-esteem is very low. She denies suicidal thoughts but states that she does not care if she dies. She has had no sleep disturbance, change in appetite, or difficulty concentrating. She is taking no medications and denies substance abuse. Results of a recent medical evaluation required by her employer were all normal, including a physical examination, EKG, multiple chemical profile, CBC, urinalysis, and a TSH level. Which of the following is the most likely diagnosis?

A. Major Depression
B. **Persistent Depressive Disorder**
C. Bipolar Disorder
D. Cyclothymia
E. Adjustment disorder with depressed mood
Effect on NE, 5-HT, DA

### ANTIDEPRESSANTS

<table>
<thead>
<tr>
<th>Generic</th>
<th>Brand</th>
<th>Usual</th>
<th>Daily Dosage</th>
<th>Selective Action On Neurotransmitters*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nortriptyline</td>
<td>Tofranil</td>
<td>150-200 mg</td>
<td>mid</td>
<td>mid</td>
</tr>
<tr>
<td>Desipramine</td>
<td>Norpramin</td>
<td>150-300 mg</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>Elavil</td>
<td>150-300 mg</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>Aventyl</td>
<td>75-150 mg</td>
<td>mid</td>
<td>mid</td>
</tr>
<tr>
<td>Protriptyline</td>
<td>Vorteks</td>
<td>15-40 mg</td>
<td>mid</td>
<td>mid</td>
</tr>
<tr>
<td>Trimipramine</td>
<td>Surmontil</td>
<td>100-300 mg</td>
<td>high</td>
<td>mid</td>
</tr>
<tr>
<td>Doxepin</td>
<td>Sominex</td>
<td>150-200 mg</td>
<td>mid</td>
<td>low</td>
</tr>
<tr>
<td>Desipramine</td>
<td>Norpramin,舍曲林</td>
<td>150-200 mg</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>Aventyl, Pamelor</td>
<td>75-150 mg</td>
<td>mid</td>
<td>mid</td>
</tr>
<tr>
<td>Trimipramine</td>
<td>Surmontil</td>
<td>100-300 mg</td>
<td>high</td>
<td>mid</td>
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<tr>
<td>Fluoxetine</td>
<td>Prozac</td>
<td>20-80 mg</td>
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<td>low</td>
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<td>Norepinephrine</td>
<td>Norpramin</td>
<td>100-300 mg</td>
<td>mid</td>
<td>mid</td>
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<tr>
<td>Amoxapine</td>
<td>Asendin</td>
<td>150-400 mg</td>
<td>low</td>
<td>low</td>
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<tr>
<td>Tramadol</td>
<td>Daypro, Celephine</td>
<td>150-300 mg</td>
<td>low</td>
<td>low</td>
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<td>Mirtazapine</td>
<td>Remeron</td>
<td>15-45 mg</td>
<td>mid</td>
<td>mid</td>
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<td>Nefazodone</td>
<td>Serzone</td>
<td>150-225 mg</td>
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<td>mid</td>
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<td>Trazolam</td>
<td>Zolpidem</td>
<td>50-200 mg</td>
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<td>Sertraline</td>
<td>Zoloft</td>
<td>50-200 mg</td>
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<td>Venlafaxine</td>
<td>Effexor</td>
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<td>Desvenlafaxine</td>
<td>Pristiq</td>
<td>25-400 mg</td>
<td>low</td>
<td>low</td>
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<tr>
<td>Bupropion</td>
<td>Wellbutrin</td>
<td>150-400 mg</td>
<td>low</td>
<td>low</td>
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<td>Sertraline</td>
<td>Zoloft</td>
<td>20-60 mg</td>
<td>low</td>
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<tr>
<td>Venlafaxine-XR</td>
<td>Effexor-XR</td>
<td>37.5-300 mg</td>
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<td>Duloxetine</td>
<td>Cymbalta</td>
<td>20-80 mg</td>
<td>low</td>
<td>low</td>
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<tr>
<td>Vilazodone</td>
<td>Stelapine</td>
<td>50-150 mg</td>
<td>low</td>
<td>low</td>
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<tr>
<td>Atomoxetine</td>
<td>Straterra</td>
<td>60-120 mg</td>
<td>low</td>
<td>low</td>
</tr>
</tbody>
</table>

### MAO INHIBITORS

<table>
<thead>
<tr>
<th>Phosphatidylserine</th>
<th>Nortriptyline</th>
<th>Phenelzine</th>
<th>Selegiline</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-90 mg</td>
<td>low</td>
<td>name</td>
<td>low</td>
</tr>
</tbody>
</table>

### BIPOLAR DISORDER MEDICATIONS

<table>
<thead>
<tr>
<th>Lithium carbonate</th>
<th>400-800 mg</th>
<th>6-12-15 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euthymol</td>
<td>600-1600 mg</td>
<td>4-10 mg</td>
</tr>
<tr>
<td>Tianeptine</td>
<td>45-90 mg</td>
<td>75-150 mg</td>
</tr>
<tr>
<td>Lamotrigine</td>
<td>30-50 mg</td>
<td>200-400 mg</td>
</tr>
</tbody>
</table>

### ANTI-OBSessional

| Olanzapine | 5-20 mg | 10-40 mg |
| Amoxapine | 150-300 mg | 20-80 mg |
| Desipramine | 150-200 mg | 10-40 mg |

### PSYCHO-STIMULANTS

| Methylphenidate | 5-20 mg | 10-40 mg |
| Citalopram | 10-40 mg | 20-80 mg |
| Sertraline | 150-200 mg | 10-40 mg |

*ACh: Anticholinergic Side Effects
**HT: Hypotensive Effects
***S: Sedating Effects
†: MAO Inhibitor

Values may vary depending on the specific drug and dosing regimen. Always consult with a healthcare professional for personalized advice.
A 32-year-old male returns for his first follow-up visit after being diagnosed with major depression 4 weeks earlier. The patient is taking citalopram (Celexa), 20 mg/day. He is tolerating the medication well and his energy level and sleep are improved, but he still complains of anhedonia. He has no other health problems and takes no other medications. The most reasonable management at this point is to

A. Add aripiprazole (Abilify)
B. Increase the dosage of citalopram
C. Add bupropion (Wellbutrin)
D. Add levothyroxine (Synthroid)
A 37-year-old male returns for his first follow-up visit after being diagnosed with major depression 4 weeks earlier. The patient is taking citalopram (Celexa), 20 mg/day. He is tolerating the medication well and his energy level and sleep are improved, but he still complains of anhedonia. He has no other health problems and takes no other medications. The most reasonable management at this point is to

- A. Add aripiprazole (Abilify)
- **B. Increase the dosage of citalopram**
- C. Add bupropion (Wellbutrin)
- D. Add levothyroxine (Synthroid)
Therapeutic doses of antidepressants

<table>
<thead>
<tr>
<th>Antidepressant</th>
<th>Evidence-based equivalent (mg)</th>
<th>Clinically practical equivalent (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluoxetine</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>bupropion</td>
<td>348</td>
<td>300</td>
</tr>
<tr>
<td>paroxetine</td>
<td>34</td>
<td>30</td>
</tr>
<tr>
<td>escitalopram</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>sertraline</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>venlafaxine</td>
<td>149</td>
<td>150</td>
</tr>
<tr>
<td>mirtazapine</td>
<td>51</td>
<td>45</td>
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</table>
A 23-year-old male comes to your office accompanied by his wife to talk about attention deficit disorder. He minimizes the concerns she raises, which include sleeping less (sometimes just 2-3 hours a night), rambling on tangentially during conversations, and being highly irritable. When you ask him about these observations, he agrees that they are true and reflect a change in his usual behavior. However, he explains that he is just becoming more social and that his wife is probably jealous of his new popularity. The patient has no family history of attention deficit disorder. His father died at a young age as a result of alcoholism. He denies stimulant use and a urine drug screen is negative. Which one of the following mental disorders is most likely in this patient?

A. Attention deficit disorder
B. Attention deficit/hyperactivity disorder
C. Generalized Anxiety Disorder
D. Major Depressive Disorder
E. Bipolar Disorder
A 23-year-old male comes to your office accompanied by his girlfriend to talk about attention deficit disorder. He minimizes the concerns she raises, which include sleeping less (sometimes just 2-3 hours a night), rambling on tangentially during conversations, and being highly irritable. When you ask him about these observations, he agrees that they are true and reflect a change in his usual behavior. However, he explains that he is just becoming more social and that his girlfriend is probably jealous of his new popularity. The patient has no family history of attention deficit disorder. His father died at a young age as a result of alcoholism. He denies stimulant use and a urine drug screen is negative. Which one of the following mental disorders is most likely in this patient?

A. Attention deficit disorder
B. Attention deficit/hyperactivity disorder
C. Generalized Anxiety Disorder
D. Major Depressive Disorder
E. Bipolar Disorder
A 9-year-old male is brought to your office by his mother because she is concerned about his ability to focus and stay still in school all day. She has paperwork from school and home, including his report card, Connor Rating Scales, behavioral screening, IQ tests, and performance testing. Your evaluation leads to a diagnosis of ADHD with no apparent co-morbidities. As you discuss management options the mother expresses concern because her parents tell her that medications for ADHD are overprescribed and addictive. She asks you for further guidance. After providing the mother with comprehensive education material, which one of the following would you recommend as first-line treatment?

A. Cognitive-behavioral therapy
B. Atomoxetine (Strattera)
C. Bupropion (Wellbutrin)
D. Clonidine (Catapres)
E. Methylphenidate (Ritalin LA, Concerta)
A 7-year-old male is brought to your office by his mother because she is concerned about his ability to focus and stay still in school all day. She has paperwork from school and home, including his report card, Connor Rating Scales, behavioral screening, IQ tests, and performance testing. Your evaluation leads to a diagnosis of ADHD with no apparent co-morbidities. As you discuss management options the mother expresses concern because her parents tell her that medications for ADHD are overprescribed and addictive. She asks you for further guidance. After providing the mother with comprehensive education material, which one of the following would you recommend as first-line treatment?

- A. Cognitive-behavioral therapy
- B. Atomoxetine (Strattera)
- C. Bupropion (Wellbutrin)
- D. Clonidine (Catapres)
- E. Methylphenidate (Ritalin LA, Concerta)
QUESTIONS:

- Which of the following has good evidence of effectively improving borderline personality disorder?
  - A. SSRI’s
  - B. Second-generation antipsychotics
  - C. Omega-3 fatty acids
  - D. No currently available pharmacotherapy
QUESTIONS:

Which of the following has good evidence of effectively improving borderline personality disorder?

A. SSRI’s
B. Second-generation antipsychotics
C. Omega-3 fatty acids
D. No currently available pharmacotherapy
REFERENCES:

- American Psychiatric Association. Highlights of Changes from DSM-IV-TR to DSM-5; 2013
- Dinger, Mike, PCOM Behavioral Medicine Board Review.
THANK YOU