Disclosure

I have nothing to disclose
Objectives

- Describe the most common psychiatric disorders.
- Describe the most common psychiatric medications, their indications, and their side effects.
- Describe risk factors for suicide.
Case #1

- Mr. D. is a 68 y-o man here for an initial visit with you. He has a h/o DM, CAD, CRI, PUD and Hypercholesterolemia. He also has a long history of Major Depression and is treated with sertraline (Zoloft) 100mg daily. He feels that the Zoloft is helpful. He denies any current SI but has been suicidal in the past.
Zoloft would be most concerning with respect to which of the following?

A. DM
B. CAD
C. CRI
D. PUD
E. Hypercholesterolemia
SSRIs & Bleeding

- First case report 1990 (44 F, ↑BT 2nd fluoxetine)
- First epidemiological study published in 1999
- By 2010, 34 observational epidemiological studies. Moderately increased risk of bleeding.

- UGIB odds ratio pooled from 14 studies = 1.7
  - SSRI: OR=1.8
  - NSAID: OR=3.3
  - Combined (SSRI + NSAID): OR=9.1
  - Offset by use of antacids

- Study of 520 surgery patients → double blood loss

Case #1 continued

- You treat Mr. D for an H. pylori infection. His PUD resolves, and he continues his Zoloft. He does well for two months but is then hospitalized with a VRE infection and is started on Zyvox (linezolid). The following day, he experiences anxiety, restlessness, flushing and confusion. He also develops a HR of 120 and a BP of 210/110.
What is the likely explanation?

A. Acute Dystonic Reaction  
B. Antidepressant Withdrawal  
C. Akesthesia  
D. Neuroleptic Malignant Syndrome  
E. Serotonin Syndrome

Question #2
Serotonin Syndrome

- **Etiology**
  - Too much of one agent
  - Two or more agents

- **Symptoms**
  - anxiety, restlessness, flushing, confusion, tremor, fever, ↓ vitals

- **Treatment**
  - D/C agent, Hydration
Depressive Disorders

- **Major Depressive Disorder**
  - 2 weeks **sadness** or **↓interest** (Δweight, Δsleep, ↓energy, Δagitation, guilt, ↓concentration, SI or death)

- **Persistent Depressive Disorder (Dysthymia)**
  - 2 years of **chronic sadness** (Δappetite, Δsleep, ↓energy, ↓self-esteem, ↓concentration, hopelessness). MDD okay.

- **Premenstrual Dysphoric Disorder**
  - **Week prior** to menses: depression, irritability, anxiety
A 37 y-o woman with bipolar disorder is BIBA following a seizure. She is confused, tremulous and ataxic with increased muscle tone and ongoing N/V and diarrhea. Labs reveal a lithium level of 2.2 (0.6-1.2). She had been stable on the same dose of lithium for years, but recently she started some new medications.
Which medication is the culprit?

A. Motrin
B. Depakote
C. Oral Contraceptives
D. Claritin
E. Vitamin C
### Bipolar I & II (Mania vs. Hypomania)

<table>
<thead>
<tr>
<th>A) Euphoric (or Irritable)</th>
<th>M: 1 week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grandiose</td>
<td>H: 4 days</td>
</tr>
<tr>
<td>2. ↓ Sleep</td>
<td>M: Can be psychotic</td>
</tr>
<tr>
<td>3. Talkative</td>
<td>H: No psychosis</td>
</tr>
<tr>
<td>4. Racing thoughts</td>
<td>M: Often hospitalized</td>
</tr>
<tr>
<td>5. Distractibility</td>
<td>H: No hospitalization</td>
</tr>
<tr>
<td>6. ↑ Activity</td>
<td>M: Major impairment</td>
</tr>
<tr>
<td>7. ↑ Pleasurable activities</td>
<td>H: Mild impairment</td>
</tr>
</tbody>
</table>

- M: Major Impairment
- H: Mild Impairment
Treatments for Bipolar Disorder

- lithium
  - Nephrogenic DI, Hypothyroidism, preg-D

- divalproex
  - Thrombocytopenia, Liver toxicity, Pancreatitis, preg-D

- carbamazapine
  - Aplastic anemia, Liver toxicity, Auto-induction, preg-D

- lamotrigine
  - Stevens-Johnson syndrome

- atypical antipsychotics
Case #3

- Over the past few months, a 30 year-old man has had several episodes (~20 minutes), during which he experienced chest pain, SOB, sweating, nausea, numbness and fear. He thought he was dying and went to the ED each time where a full medical work up was completely normal. He is quite worried this will happen again.
Which medication would you add?

A. Zoloft (sertraline)
B. Wellbutrin (bupropion)
C. Seroquel (quetipine)
D. BuSpar (buspirone)
E. None of the above

Question #4
Key Anxiety Disorders

- Panic Disorder
  - Intense fear with multiple somatic symptoms

- Specific Phobia
  - Fear or anxiety about an object or situation

- Social Anxiety Disorder (Social Phobia)
  - Anxiety about social situations or interactions

- Generalized Anxiety Disorder
  - 6 months: worry, ↓energy, ↓focus, ↓sleep, tension
OCD and Related Disorders

- Obsessive-Compulsive d/o
  - Intrusive thoughts ↑distress – Behavior ↓distress

- Body Dysmorphic d/o
  - Preoccupation with perceived physical defect

- Hoarding d/o
  - Distress associated with discarding items

- Trichotillomania
  - Pulling out ones own hair

- Excoriation d/o
  - Picking at skin → lesions
Post Traumatic Stress Disorder

- Exposure to death, serious injury, or sexual violence
  - Experiencing it yourself
  - Witnessing another experiencing it
  - Learning this happened to close family or friend
  - Repeated exposure to aversive details

- Intrusive: memories, dreams, flashbacks, distress 2° to cues

- Avoidance: memories or feelings, external reminders

- Negative cognition/mood: memory, ↓pleasure, ↓activity

- ↑Arousal: irritable, angry, reckless, hypervigilance, ↓sleep
Which is a black box warning for SSRI’s?

A. ↑ Seizure
B. ↑ Suicide
C. ↑ SIADH
D. ↑ Serotonin Syndrome
E. ↑ Platelet Dysfunction
SSRI’s & FDA Indications

- MDD
- GAD
- OCD
- Panic d/o
- PTSD
- PMDD
- Bulemia
SSRI’s & Other Considerations

- Sexual Dysfunction
- Nausea (90% of receptors in GI tract)
- Platelet Dysfunction
- Hyponatremia
- Insomnia
- Bruxism
- Fairly safe in OD
Case #4

- A 50 y-o man has a h/o recalcitrant hypertension. He is on multiple antihypertensive medications and required hospitalization for a hypertensive crisis last year. Over the past few weeks you have been evaluating him for depression and have decided an antidepressant is indicated.
Which would you avoid?

A. Effexor (velafaxine)  
B. Wellbutrin (bupropion) 
C. Prozac (fluoxetine)  
D. Remeron (mirtazapine)  
E. Serzone (nefazadone)

Question #6
Serotonin Norepinephrine Reuptake Inhibitors

- **Examples**
  - Effexor (venlafaxine), Cymbalta (duloxetine)

- **Indications**
  - MDD, GAD, Panic d/o, Fibromyalgia, Diabetic Neuropathic Pain, Musculoskeletal Pain

- **Side Effects**
  - ↑BP, Nausea, Sexual dysfunction, Insomnia, Anticholinergics, ↓ Appetite
## Other Common Antidepressants

<table>
<thead>
<tr>
<th>Name</th>
<th>Indications</th>
<th>Side Effects</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>mirtazapine (Remeron) 5HT blockade and</td>
<td>MDD</td>
<td>Sedation</td>
<td>No sexual dysfunction</td>
</tr>
<tr>
<td>Alpha2-antagonism</td>
<td></td>
<td>Weight gain</td>
<td>Good in HIV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orthostatis</td>
<td>Few interactions</td>
</tr>
<tr>
<td>nefazodone 5HT &amp; NE blockade Alpha1-</td>
<td>MDD</td>
<td>Sedation</td>
<td>Black box for hepatotoxicity</td>
</tr>
<tr>
<td>antagonism</td>
<td></td>
<td>Dizziness</td>
<td>low sexual dysfunction</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bupropion (Wellbutrin) DA &amp; NE reuptake</td>
<td>MDD</td>
<td>Insomnia</td>
<td>No sexual dysfunction</td>
</tr>
<tr>
<td>Blockade</td>
<td>Smoking-</td>
<td>Agitation</td>
<td>Avoid in Sz &amp; Eating d/o</td>
</tr>
<tr>
<td></td>
<td>cessation</td>
<td>↓ appetite</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off-label ADHD</td>
<td>Seizures</td>
<td></td>
</tr>
</tbody>
</table>
Case #5

- A 55 y-o man with a long h/o migraines and insomnia sustains a fall and injures his back. Over the following year, he develops neuropathic pain in his legs, and he becomes quite depressed. His screen for mania is negative. You decide to start him on Pamelor (nortiptyline)
Before starting, you would check?

A. Liver Function
B. Renal Function
C. An EKG
D. Cholesterol Level
E. Fasting Blood Sugar

Question #7
Tricyclic Antidepressants (TCA’s)

- Examples: amitriptyline, nortriptyline
- Uses: MDD, OCD, Migraine, Neuropathic Pain, Insomnia
- Side Effects: Anticholinergics, Orthostasis, Weight gain, Sexual dysfunction, Cardiac Conduction Delay
- Can check blood levels
Case # 6

- A 30 y-o male post-doc believes his neighbor has been spying on him and reading his mail for the past 4 months. “I think he’s also been taking pictures of me when I leave my apartment.” The patient denies depressed or elevated mood and denies hallucinations. No drug use. He reports making good progress on his thesis.
Which diagnosis is most likely?

A. Brief Psychotic Disorder
B. Schizoaffective Disorder
C. Delusional Disorder
D. Schizophrenia (paranoid)
E. Schizophrenia (undifferentiated)
Schizophrenia

- 6 months of social/occupational impairment
- Two or more symptoms for a month:
  1. Delusions
  2. Hallucinations
  3. Disorganized Speech
  4. Disorganized Behavior
  5. Negative Symptoms (avolition, flat affect)

- Brief Psychotic (< 1 m); Schizophreniform (< 6 m)
Schizoaffective Disorder

- Criteria are met for schizophrenia
- Criteria are met for MDD or Bipolar
- 2 weeks of psychosis without mood symptoms
- Mood symptoms must be present for a substantial portion of the overall illness
Case #6 Continued

- He is given Haldol 5mg qhs, and 2wks later presents to the ED with moderately ↑ muscle tone and t=101.5 (otherwise normal vitals). He also seems mildly confused. Laboratory testing reveals a CK of 3500 with normal renal function. You make a tentative diagnosis of NMS and stop his Haldol. You also start IV hydration.
What other treatment is indicated?

A. Dantrolene
B. Bromocriptine
C. Dantrolene + Bromocriptine
D. Cogentin
E. None of the above

Question #9
Traditional Antipsychotic Side Effects

- EPS – parkinsonism, dystonias, akathisia, tardive dyskinesia
  - Often treated with anticholinergics
- Hyperprolactinemia – galactorrhea
- Neuroleptic Malignant Malignant Syndrome:
  - Fever, AMS, ↓vitals, rigidity (↑CK)
  - Treat: d/c med, supportive care, bromocriptine (D2 agonist), dantrolene (muscle relaxant), ECT
Case #7

- A 74 y-o man with dementia has had delusions for 2-months that ghosts have been stealing his food. He does not see them but is certain they visit while he is asleep or away from home. He says this happens a couple times a week and thinks it is the ghosts of dead relatives.

- In general he is alert and calm but annoyed about the ghosts. He denies SI/HI/AH/VH.

- He is started on haloperidol 2mg po daily, but after 1-week of treatment, the delusions are unchanged. His MSE remains the same.
In addition to patient-education which of the following would you do next??

A. D/C haloperidol and monitor
B. Continue haloperidol 2mg daily
C. ↑ haloperidol to 5mg and add benztropine (Cogentin) 0.5mg twice a day
D. D/C haloperidol and start risperidone (Risperdal) 1mg twice a day
E. D/C haloperidol and start quetiapine (Seroquel) 50mg nightly and titrate up slowly

Question #10
Atypical Antipsychotics

- DA, SE, Ach Receptors
- Indications
  - Schizophrenia, SAD, Bipolar, MDD
  - ↓ rates of EPS and NMS
  - Weight gain, ↑ lipids, DM,
Which disorder involves falsifying symptoms?

A. Conversion Disorder
B. Somatic Symptom Disorder
C. Illness Anxiety Disorder
D. Factitious Disorder
E. Body Dysmorphic Disorder
Somatoform Disorders

“There are some things they don’t teach you in medical school. I think you’ve got one of those things.”
Somatic Symptom Disorders

- **Somatic Symptom d/o:**
  - Somatic symptoms are distressing or lead to ↓ function
  - Excessive thoughts, feelings, or behaviors that are:
    - Disproportionate, ↑ anxiety, ↑ time and energy devoted

- **Illness Anxiety d/o (hypochondriasis):**
  - Preoccupation with having or acquiring a serious illness

- **Conversion d/o:**
  - Symptoms of altered motor or sensory function
  - Incompatibility between the symptom and recognized neurological or medical conditions
Case #8

- A 48 y-o man with a h/o IVDU is brought in by his roommate who says, “He’s up in the middle of the night, mopes around all day and yells at me all the time.” On exam, the patient is irritable, labile and distractible. He shows psychomotor slowing, thinks he can read minds and scores a 24/30 on his MMSE. He denies any psychiatric history.
Which is most likely:

A. Paraphrenia
B. Depression 2\textsuperscript{o} substance use
C. Multi-infarct dementia
D. Schizophrenia
E. HIV-associated “mania”
Psychiatric Illness Secondary to a GMC
### Psychiatric Illness Secondary to a GMC

<table>
<thead>
<tr>
<th>Endocrine</th>
<th>Vitamin Deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid</td>
<td>B12, Thiamine</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Metabolism</td>
</tr>
<tr>
<td>Cushing’s Syndrome</td>
<td>AIP, Wilson’s disease</td>
</tr>
<tr>
<td>Addison’s Disease</td>
<td>Toxins (CO, lead, mercury, aluminum)</td>
</tr>
<tr>
<td>CNS</td>
<td>Medications</td>
</tr>
<tr>
<td>Tumors, Parkinson’s, Seizures, Infections</td>
<td>(anticholinergics, steroids, Parkinson d/o)</td>
</tr>
</tbody>
</table>

- Autoimmune
Case # 9

- A 25 year old man is preoccupied with being criticized in social settings. He left his last job because he felt that others would likely disapprove of him. He tends to be very guarded with his girlfriend, because he thinks she will probably make fun of him.
Which diagnosis is most likely?

A. Avoidant P.D.
B. Schizoid P.D.
C. Paranoid P.D.
D. Dependent P.D.
E. Interpersonal P.D.

Question #13
Personality Disorders

A. Pattern of inner experience and behavior that deviates markedly from the cultural norm. (Two or more of the following)

1. Cognition (perception)
2. Affectivity
3. Interpersonal Functioning
4. Impulse Control
Cluster A ("weird")

1. Paranoid – Distrust
2. Schizoid – Detachment and ↓ emotional expression
3. Schizotypal - Eccentric

Cluster C ("worried")

1. Avoidant – Social inhibit., feelings of inadequacy
2. Obsessive-Compulsive – Perfection, order, control
3. Dependent - Clinging

Cluster B ("wild")

1. Antisocial – Disregard for the rights of others
4. Narcissistic – Need for admiration, ↓empathy
Case #10

- A 45 y-o man is admitted for severe alcohol withdrawal. When he is able to converse, he endorses a long h/o alcohol and IV heroin use. He has tried multiple rehab programs over the years with variable success. In addition to counseling and rehab, which of the following medications would you consider?
Which medication?

A. Chantix (varenicline)
B. Wellbutrin (bupropion)
C. Antabuse (disulfiram)
D. Burex (buprenorphine)
E. Revia (naltrexone)
DSM5 - Substance Use Disorder

- Cravings
- Use more than intended
- Attempts to cut down
- Increase time to obtain, use, recover
- Tolerance, Withdrawal
- Physical or physiological problems
- Failure to fulfill obligations at school, work, or home
- Social or interpersonal problems
- Use in physically hazardous situations

* Severity: mild(2-3), Mod(4-5), Severe (>5)
## Medications for Substance Use D/O

<table>
<thead>
<tr>
<th>Medication</th>
<th>Targeted Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>varencline</td>
<td>Nicotine</td>
</tr>
<tr>
<td>bupropion</td>
<td>Nicotine</td>
</tr>
<tr>
<td>nicotine replacement</td>
<td>Nicotine</td>
</tr>
<tr>
<td>disulfiram</td>
<td>Alcohol</td>
</tr>
<tr>
<td>acamprosate</td>
<td>Alcohol</td>
</tr>
<tr>
<td>naltrexone</td>
<td>Opioids, Alcohol</td>
</tr>
<tr>
<td>methadone</td>
<td>Opioids</td>
</tr>
<tr>
<td>buprenorphine</td>
<td>Opioids</td>
</tr>
</tbody>
</table>
Case #11

- A 66 year-old, divorced, Caucasian man with two sons presents with SI. Since his divorce three years ago, he has become more depressed and has been drinking more. He has a history of one prior suicide attempt at age 17 when his father died. He endorses vague AH telling him that he is a “bad father”. He denies HI or access to firearms.
Which is not a risk factor for suicide?

A. Age > 65
B. Divorced
C. Alcohol
D. Children
E. Hallucinations
Suicide

- U.S. rate is 11 per 100,000
- 11th leading cause of death (3rd for age 15-24)
- Firearms > Suffocation > Overdose
- Men > Women (roughly 4 times)
- White > Nonwhite (except Native American)
- Older white > Younger white
- Younger non-white > Older non-white
Suicide Risk Factors

- Sex
- Age
- Depression
- Previous attempt
- Ethanol
- Rational thought loss
- Sickness
- Organized plan
- No spouse
- Social support lacking
Good Luck!
Answer Key

1. 4
2. 5
3. 1
4. 1
5. 2
6. 1
7. 3
8. 3
9. 5
10. 1
11. 4
12. 5
13. 4
14. 5
15. 4