

MiCMRC Educational Webinar

# What is this Psych Med for and More

September 26, 2018



MiCMRC Educational Webinar  
*What is this Psych Med for and More*

*Expert Presenter:*

Patricia Ryan, MD

Behavioral Health Collaborative Care

Medical Director & Consulting Psychiatrist

IHA





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#### MiCMRC Educational Webinar

Wednesday, April 26, 2017 -

2:00pm

#### Diabetes Prevention

Presented by

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Kim Lombard, MS, RD, CDE

[Webinar Registration](#)

DIABETES

CHRONIC  
CONDITIONS

#### MiCMRC Educational Webinar

Wednesday, May 24, 2017 -

2:00pm

#### Pain Assessment in Ambulatory Care - Time to Repeal and Replace the Pain Score

Presented by

Terri Voepel-Lewis, PhD RN

[Webinar Registration](#)

PAIN  
MANAGEMENT

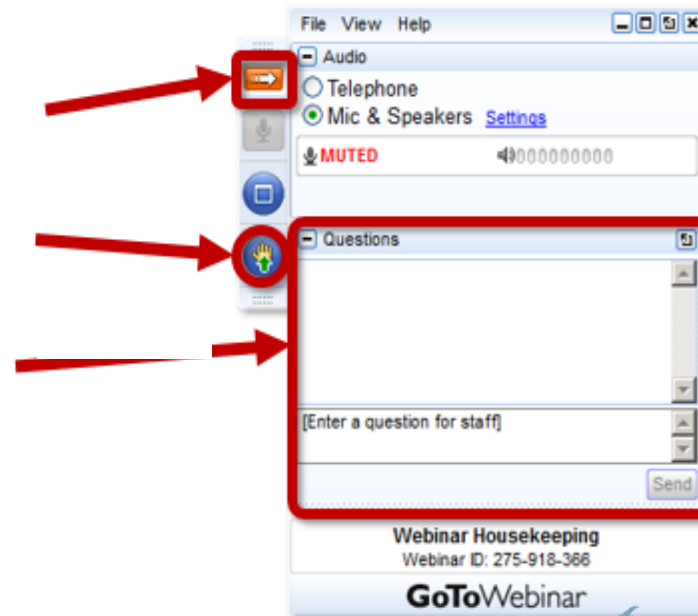


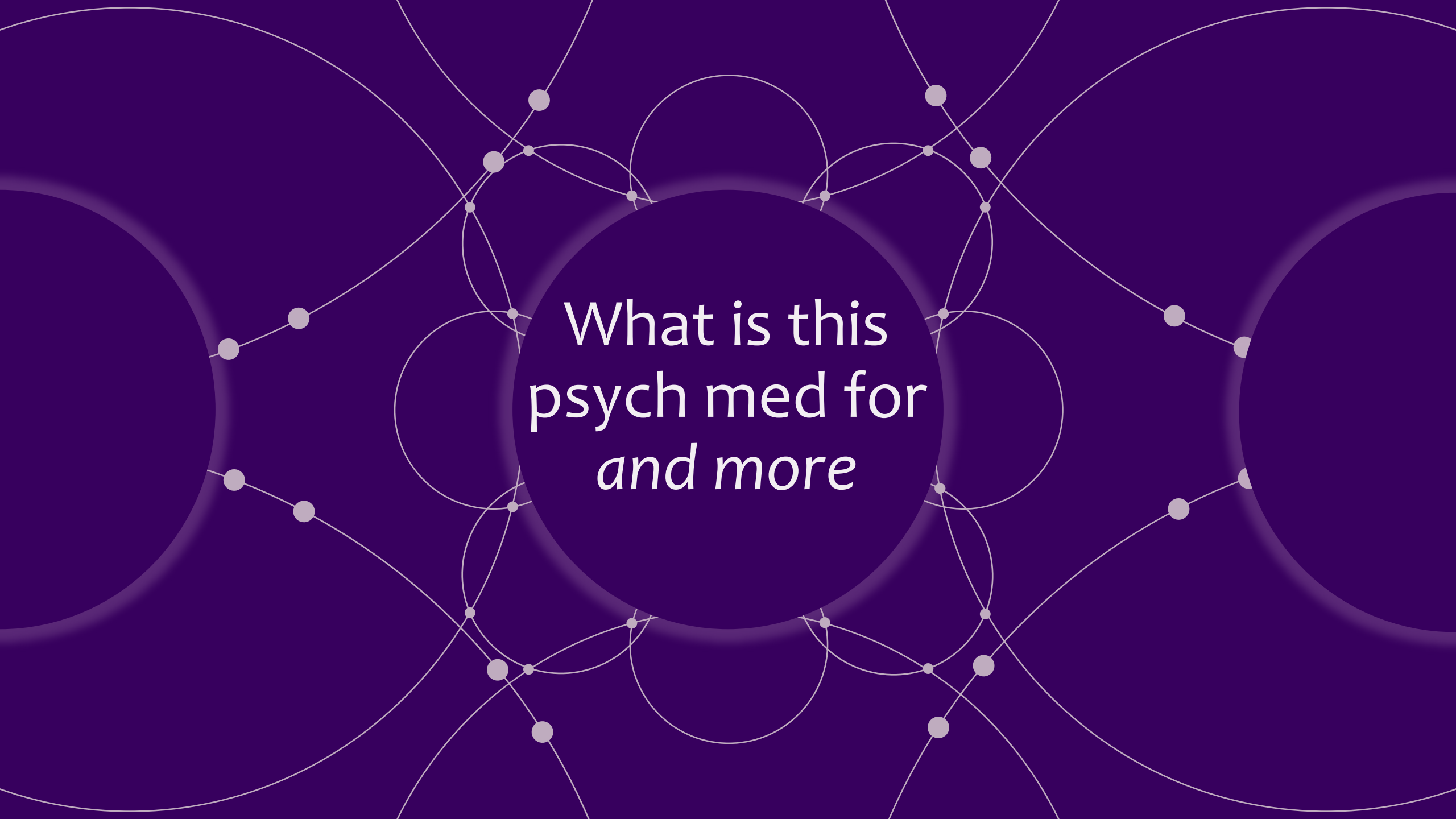
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**Collapse Toolbar**

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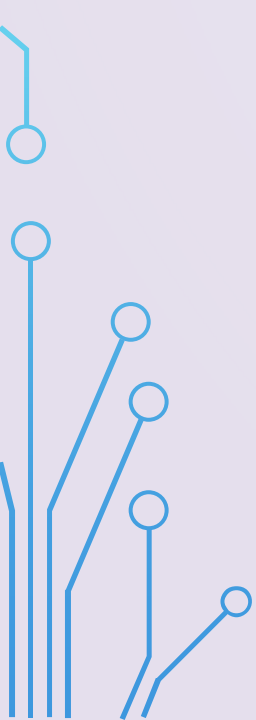
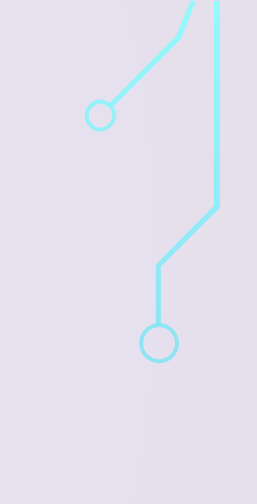
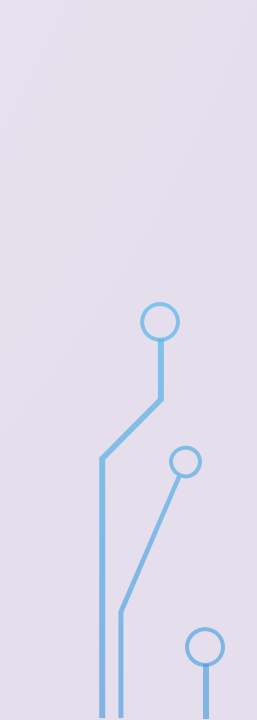




What is this  
psych med for  
*and more*



# PATRICIA RYAN, MD

- I have worked to ensure that all of the information in these lectures is accurate and consistent with general psychiatric and medical standards. However in view of ongoing research and the proliferation of new information everyone is urged to keep abreast of changes in recommendations. Medication prescribing decisions are often complex and these recommendations should be implemented with consideration of each individual patient's past and current clinical status.
- 
- 
- 



# PSYCHIATRIC MEDICATIONS HAVE BEEN NAMED BASED ON THEIR INDICATIONS

Antidepressants

Mood stabilizers

ADD meds

Antianxiety agents

Antipsychotics

# THE PROBLEM IS THEY ARE OFTEN USED FOR MORE THAN ONE DIAGNOSIS

- So people become confused
- e.g. Abilify is used for schizophrenia, bipolar dx and major depression
- Abilify is listed as an antipsychotic but is also a mood stabilizer and an augmenting agent to antidepressants for major depression
- On the horizon soon is a new neuroscience based nomenclature (NbN) naming psychiatric meds based on their mechanism of action

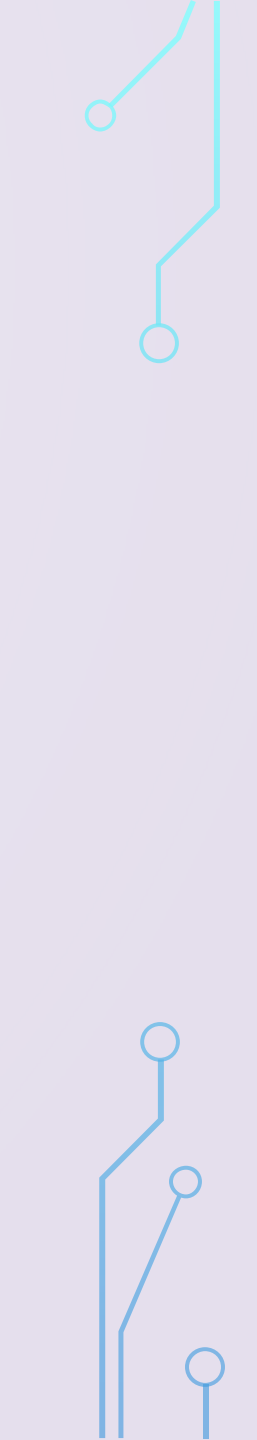




- ***Medication categories***

- Antidepressants
- Antianxiety agents/sedative hypnotics
- Antipsychotics
- Mood Stabilizers
- ADD meds

- ***Discussion Points***

- Mechanism of action
  - Indications
  - Side Effects/Drug Interactions
  - Clinical Pearls
- 

# NEURONAL SYNAPSE

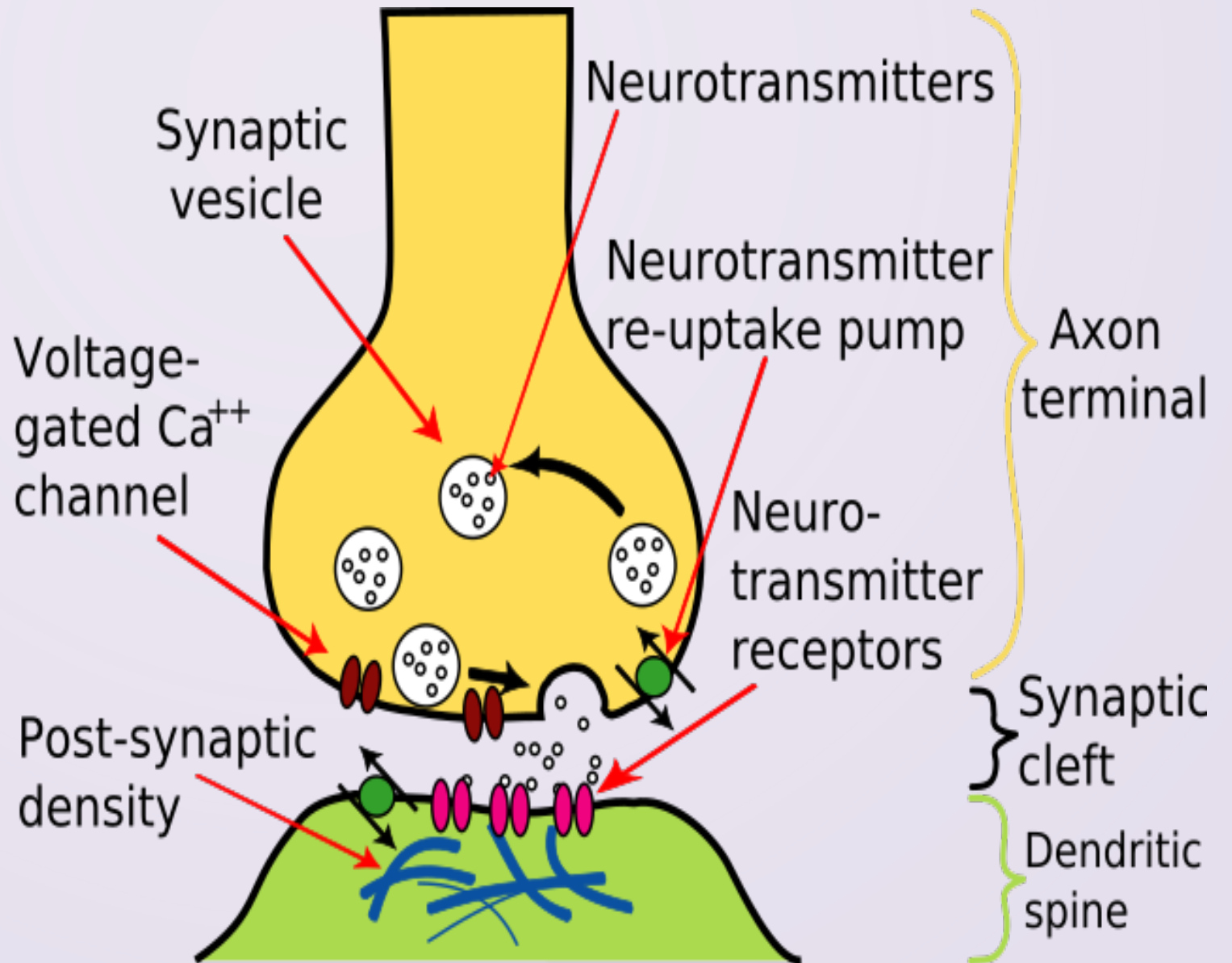
## Neurotransmitters

Serotonin

Norepinephrine

Dopamine

GABA



# ANTIDEPRESSANTS

4 categories

SSRIs

SNRIs

NRIs

TCAs

# SSRI *SELECTIVE SEROTONIN REUPTAKE INHIBITORS*

## GENERIC NAME

- Fluoxetine
- Sertraline
- Citalopram
- Escitalopram
- Paroxetine
- Fluvoxamine
- Vilazodone
- Vortioxetine
- Bupirone (partial serotonin agonist)

## BRAND NAME

- Prozac
- Zoloft
- Celexa
- Lexapro
- Paxil
- Luvox
- Viibryd
- Trintellix
- Buspar

# COMMON USES

- Anxiety

Generalized anxiety dx, panic dx, social anxiety dx, Obsessive compulsive dx, PTSD, Premenstrual dysphoric dx, menopausal hot flashes

- Can help with Major Depression

But if significant problems with energy, motivation and little anxiety patients often do better with meds that work on norepinephrine

# SIDE EFFECTS

- Watch for any initial worsening of mood
- **Mild and Usually Self Limiting:**
  - Nausea
  - Headache
  - Initial Jitteriness
- **Other Side Effects:**
  - Sexual Dysfunction/Occ. Improves Over Months
  - Weight Gain
  - Insomnia
  - Fatigue
  - Emotional Blunting
  - Teeth Grinding
  - Sweating
  - Prolonged Bleeding/ Increase in GI Bleeds/esp. if with ASA, NSAIDS or Anticoagulants
  - Hyponatremia esp. in elderly (watch for confusion and tiredness/often happens soon after starting med)

# DRUG/DRUG INTERACTIONS

- More drug/drug interactions: Prozac, Paxil, Luvox, Viibryd
- Serotonin syndrome (autonomic instability, neuromuscular rigidity, confusion)  
SSRI plus other serotonergic agents for example: Ultram (tramadol), MAO-I,  
not much of a problem with antimigraine meds, the triptans
- QTc prolongation with Celexa and probably Lexapro so need to avoid other  
QTc prolongation agents

# CLINICAL PEARLS

- Prozac often see less weight gain, long half life so good for compliance problems, no discontinuation symptoms
- Paxil many side effects, weight gain, sexual dysfunction, cannot stop abruptly or get **discontinuation symptoms**: nausea, tiredness, vertigo, electrical sensations in the brain, mood lability
- Zoloft and Trintellix have more GI distress
- Buspar is often added to antidepressants as an augmenting agent/can help with sexual dysfunction and anxiety symptoms/ helps with GAD not much with panic dx/does not work prn, has to be bid dose and takes weeks to work



# NRI *NOREPINEPHRINE REUPTAKE INHIBITOR*

- Generic name

## Brand Name

Bupropion

Wellbutrin IR has to be tid

Bupropion ER 12hrs

Wellbutrin SR has to be bid

Bupropion ER 24hrs

Wellbutrin XL once a day

Bupropion ER 450 mg only

Forfivo XL once a day

Bupropion Hydrobromide

Aplenzin

174mg, 348mg and 522 mg ( = 150, 300, 450)

# COMMON USES

- Major Depressive disorder
- Seasonal Affective Disorder (SAD)
- Smoking Cessation (Zyban)
- ADHD
- SSRI induced sexual dysfunction

# SIDE EFFECTS

- Watch for any initial worsening of mood
- **Mild and Usually Self Limiting:**
  - Nausea
  - Headache
  - Initial Jitteriness
  - Insomnia
- **Other Side Effects:**
  - Increased Anxiety
  - Weight loss
  - Tremor
  - Dry Mouth/Constipation
  - Increased BP
  - Increased Seizure Risk at higher doses/cannot go above 450 of XL or 400 of SR

# DRUG/DRUG INTERACTIONS

- More drug/drug interactions
- Can show up in the urine as a stimulant

# CLINICAL PEARLS

- Can help reverse some of the SSRI's side effects of weight gain, sexual dysfunction
- Helps with decreased motivation, energy and concentration
- It can worsen anxiety so if patient has anxiety and depression often start with SSRI and then add in Wellbutrin if above symptoms remain
- Contraindications are head injury and bulimia as can increase seizure risk
- Cannot crush pills as increases seizure risk due to higher blood levels

# SNRI *SEROTONIN NOREPINEPHRINE REUPTAKE INHIBITOR*

## Generic Name

- Venlafaxine (IR and XR)
- Desvenlafaxine
- Duloxetine
- Levomilnacipran

## Brand Name

- Effexor (XR)
- Pristiq
- Cymbalta
- Fetzima

# COMMON USES

- Major depressive disorder
- Generalized anxiety dx, social anxiety dx, panic dx
- Fibromyalgia, chronic musculoskeletal pain, diabetic neuropathy pain, interstitial cystitis, urinary incontinence, menopausal hot flashes

# SIDE EFFECTS

- Watch for any initial worsening of mood
- **Initial and Usually Self Limiting:**
  - Nausea
  - Headache
  - Jitteriness
- **Other Side Effects:**
  - Sexual Dysfunction
  - Insomnia
  - Fatigue
  - Dry Mouth
  - Dizziness
  - Sweating
  - Constipation
  - Weight Gain
  - Hypertension esp. with higher doses



# DRUG/ DRUG INTERACTIONS

- More drug/drug interaction: Cymbalta
- Cymbalta and heavy alcohol use discouraged as there are rare reports of hepatic toxicity

# CLINICAL PEARLS

- Significant **discontinuation symptoms** with Effexor, Pristiq and Cymbalta
- Cymbalta has the most data for the chronic pain conditions
- They can help with chronic pain even if person is not depressed
- Levomilnacipran is an enantiomer of milnacipran which is Savella and has the indication for fibromyalgia

# TCA

## TRICYCLIC ANTIDEPRESSANTS

### SEROTONIN AND NOREPINEPHRINE REUPTAKE INHIBITORS

- *Nortriptyline, Pamelor*
- *Amitriptyline, Elavil*
- Used in small doses often at night for chronic pain and sleep issues and for migraines
- Significant side effects: sedation, orthostasis, dry mouth, constipation, blurred vision, urinary retention, weight gain, sexual dysfunction, cardiac conduction problems, arrhythmias, QT prolongation, lethal in overdose

# NOREPINEPHRINE-SEROTONIN MODULATOR

- *Mirtazapine- Remeron*
- Presynaptic alpha – 2 adrenergic antagonist (not a reuptake inhibitor)
- 5-HT<sub>2</sub> and 5-HT<sub>3</sub> post synaptic receptor blocker so decreases anxiety, relieves insomnia, increases appetite, decreases nausea
- Used frequently in cancer patients
- Side effects: significant weight gain, tiredness
- At lower doses it is more sedating and less so at higher doses (>15 mg)
- No sexual dysfunction/helps with GERD

# SEROTONIN MODULATORS

- *Trazodone, Desyrel*
- Weak serotonin reuptake inhibitor, potent antagonist at 5-HT<sub>2A</sub> and 5-HT<sub>2C</sub> receptors
- Used mainly for insomnia as too sedating at antidepressant doses
- Side effects at low doses: mainly sedation, dizziness, orthostasis, nausea, headache, dry mouth, blurred vision, rare reports of priapism

# ANTI ANXIETY AGENTS

## *BENZODIAZEPINE SITE ON GABA RECEPTOR*

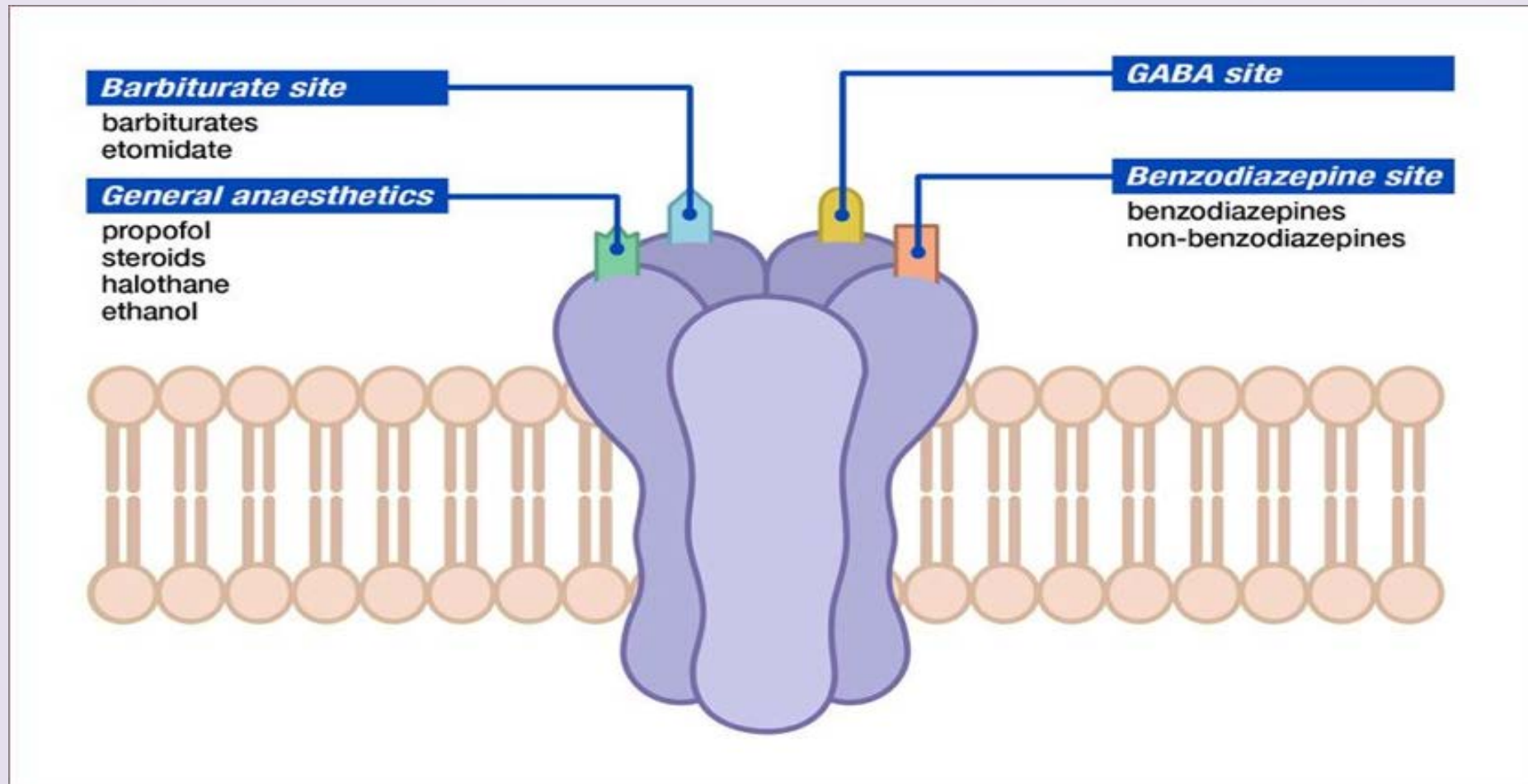
### Generic Name

- Alprazolam
- Clonazepam
- Diazepam
- Lorazepam

### Brand Name

- Xanax
- Klonopin
- Valium
- Ativan

# GABA RECEPTOR/INHIBITORY NEUROTRANSMITTER



# COMMON USES

- Short term situational anxiety, used on prn basis
- Treatment resistant anxiety disorders
- IV for agitation
- Alcohol withdrawal
- Muscle relaxation
- Acute seizures or status epilepticus



# SEDATIVE/HYPNOTICS

## GENERIC NAME

- Temazepam
- Triazolam
- Zolpidem
- Eszopiclone
- Zaleplon
- Ramelteon
- Suvorexant

## BRAND NAME

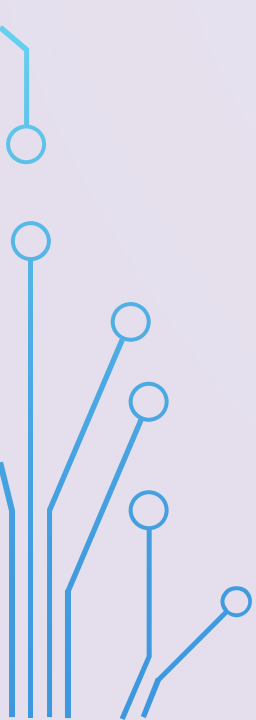
- Restoril
- Halcion
- Ambien
- Lunesta
- Sonata
- Rozerem
- Belsomra

## MECHANISM OF ACTION

- Benzodiazepine site
- Benzodiazepine site
- Subunit of GABA receptor
- Subunit of GABA receptor
- Subunit of GABA receptor
- Melatonin agonist
- Orexin receptor antagonist



# COMMON USES

- Insomnia
  - Jet lag
  - Shift work sleep disorder
  - Don't work very well
  - Use short term
- 



# SIDE EFFECTS OF BENZO'S AND HYPNOTICS

- Daytime grogginess
- Anterograde amnesia
- CNS respiratory depression
- Develop tolerance/Addictive
- Withdrawal effects
- Falls in elderly
- Cognitive impairments (not clear if increases risk of dementia)
- Disinhibited behavior

# CLINICAL PEARLS

- Try not to use them, esp. in patients with OSA, COPD or on opioids, as can cause respiratory depression
- Rozerem is the only one that is not addictive but usually works only for shift work sleep dx, jet lag and circadian rhythm problems
- Treat the underlying cause of the insomnia
- Cognitive Behavioral therapy for insomnia is the first line treatment recommended

# TYPICAL ANTIPSYCHOTICS

- Typical antipsychotics or First generation antipsychotics/Dopamine D2 receptor antagonists
- Not used much now as causes potentially irreversible tardive dyskinesia (a movement disorder), Parkinsonian like symptoms and akathisia (an extreme restlessness)
- Haldol still used often in hospital IV

# ATYPICAL ANTIPSYCHOTICS

SECOND GENERATION/D2 RECEPTOR ANTAGONISTS/SEROTONIN RECEPTOR ANTAGONIST/PARTIAL AGONIST

Generic name

Aripiprazole

Brexpiprazole

Asenapine

Cariprazine

Clozapine

Iloperidone

Lurasidone

Olanzapine

Paliperidone

Quetiapine

Risperidone

Ziprasidone

Brand name

Abilify

Rexulti

Saphris

Vraylar

Clozaril

Fanapt

Latuda

Zyprexa

Invega

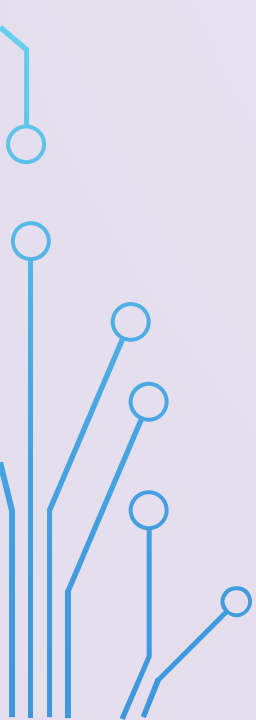
Seroquel

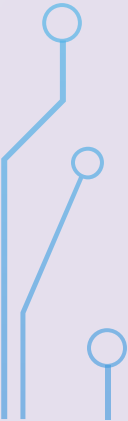
Risperdal

Geodon



# COMMON USES

- Psychosis
  - Schizophrenia/schizoaffective dx
  - Bipolar disorder
  - Major depressive dx as an adjunct
  - Irritability in Autism
  - Impulse Control Disorders
- 



# SIDE EFFECTS OF SECOND GENERATION AGENTS

- Many cause weight gain, hyperlipidemia, DM esp. Clozaril, Zyprexa, Seroquel, Risperdal
- QTc prolongation esp. with Geodon
- Increased mortality rate in geriatric patients with dementia related psychosis, due to cardiac related events or infections
- Neuroleptic malignant syndrome (rare)- fever, severe muscle rigidity and autonomic instability
- Tardive dyskinesia can also occur with these but is less frequent
- Sedation esp. Clozaril, Zyprexa, Seroquel
- Akathisia- Abilify, Rexulti



# MOOD STABILIZERS

*MAINLY USED FOR BIPOLAR DX BUT ALSO AS ADJUNCT FOR MAJOR DEPRESSION*

- Lithium
- Lamotrigine
- Valproic Acid

## LITHIUM/*LITHOBID, ESKALITH*

- Alters neuronal sodium transport
- Excreted by kidneys
- Therapeutic level is very close to toxic level
- Common side effects: nausea, diarrhea, tremor, weight gain, hypothyroidism, acne, worsening psoriasis
- Serious but rare side effects: bradycardia, cardiac arrhythmias, kidney dysfunction
- Drug interactions: NSAIDS, ACE inhibitors, diuretics can increase Li levels
- Dehydration and low salt diets can increase levels

# LAMOTRIGINE/ *LAMICTAL*

- Sodium channel blocker
- Common side effects: dizziness, nausea, headache
- Serious but rare: Severe potentially life threatening skins rashes/Stevens-Johnson syndrome/ reduced risk if increase doses slowly
- Drug/drug interactions with other anticonvulsants can influence levels

# VALPROIC ACID/*DEPAKOTE*

- Sodium channel blocker
- Common side effects: sedation, fatigue, nausea, dizziness, hair loss, tremor, decreased platelets
- Serious but rare: Hepatotoxicity, pancreatitis, PCOS

# STIMULANTS

- Inhibits reuptake of dopamine and norepinephrine
- Two types: amphetamine- *Adderall, Vyvanse*  
methylphenidate- *Ritalin, Concerta*
- Numerous different release systems: short acting vs long acting
- Common Uses: ADD, Treatment resistant depression, Narcolepsy, Binge eating disorder
- Common side effects: decreased appetite, insomnia, increased anxiety, irritability, GI distress, tics, headache, hypertension, tachycardia, dry mouth
- Class warning: if known or suspected cardiac problems, consult cardiologist



**THE END**

*ANY QUESTIONS?*