REAL PSYCHIATRY

An Educational Experience Designed for and by APPs on the Frontline of Modern Practice

INTERSECTING INDICATIONS

THE CHALLENGES AND OPPORTUNITIES OF CLINICAL OVERLAP IN UPGRADING PATIENT MANAGEMENT

— JANUARY 13, 2024 —

Project Overview

CHALLENGES

- Many psychiatric conditions have overlapping symptoms, making it challenging to distinguish whether something is a primary disorder versus a secondary effect. This can lead to **suboptimal diagnosis and assessment of symptom burden.**
- The temptation to treat each symptom individually can lead **to suboptimal medication regimens** (e.g., unnecessary polypharmacy), potentially worsening symptoms or leading to adverse effects.

OPPORTUNITIES

- **Implement reliable clinical tools** capable of separating symptoms of different disorders to better deconstruct complicated patient presentations
- Utilize **evidence-based medication regimens** to address specific symptomatology and help meet the needs of patients with a broad constellation of symptoms

OUR PANEL WILL USE EVIDENCE- AND CASE-BASED PROBLEM SOLVING TO BEST CONNECT THE DOTS BETWEEN SYMPTOMS AND TREATMENT.

Presenting Faculty

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Psychiatric Nurse Practitioner

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Meet John.

- A 61-year-old male with a **history of BD-1**.
- He presents to your office for an **initial visit** after transferring to your practice.
- He currently reports uncontrolled symptoms of **anxiety, insomnia, mania, and involuntary movements**.

Meet John.

DIAGNOSIS CODES

F41.9 Anxiety disorder, unspecified
F32.A Depression, unspecified
F31.9 Bipolar disorder, unspecified
F90.0 Attention-deficit/hyperactivity disorder
G47.00 Insomnia, unspecified

CURRENT MEDICATION LIST

Atomoxetine 40mg: 1 PO QD
Bupropion 150mg: 2 PO AM; 1PO PM
Buspirone 10mg: 1 PO TID
Cariprazine 3mg: 1 PO QD
Deutetrabenazine 12mg: 2 PO BID
Lamotrigine 200mg: 1 PO BID
Propranolol 20mg: 1 PO TID
Trazodone 200mg: 1 PO QHS

WHAT ARE THE CHALLENGES IN THIS CASE?

- OVERLAPPING SYMPTOMATOLOGY
- UNNECESSARY POLYPHARMACY

Focus of this presentation

- SUBOPTIMAL USE OF FDA-APPROVED & EFFICACIOUS MEDICATIONS
- INADEQUATE SYMPTOM MANAGEMENT
- ADVERSE SIDE EFFECTS

Check out our other modules that address these challenges in more detail

AUDIENCE POLL

When patients transfer to you from an outside practice/provider, how often are they already prescribed what you would consider **unnecessary polypharmacy**?

a) Almost always
b) Very often
c) Often
d) Not very often
e) Rarely
f) Not applicable

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OVERLAPPING SYMPTOMATOLOGY

Psychiatric conditions are complicated

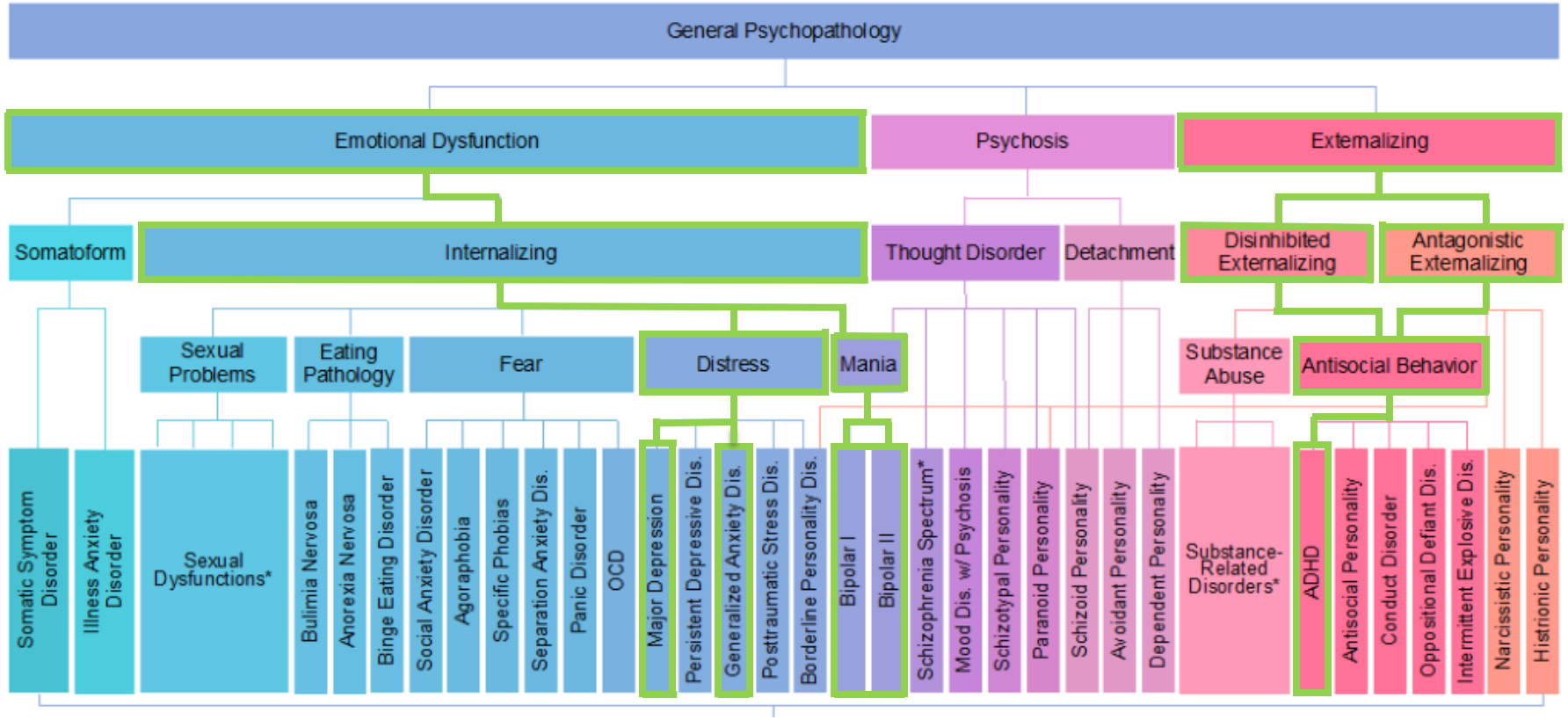

Image adapted from Forbes MK. Implications of the symptom-level overlap among DSM diagnoses for dimensions of psychopathology. *Journal of Emotion and Psychopathology*. 2023;1(1):104-112.

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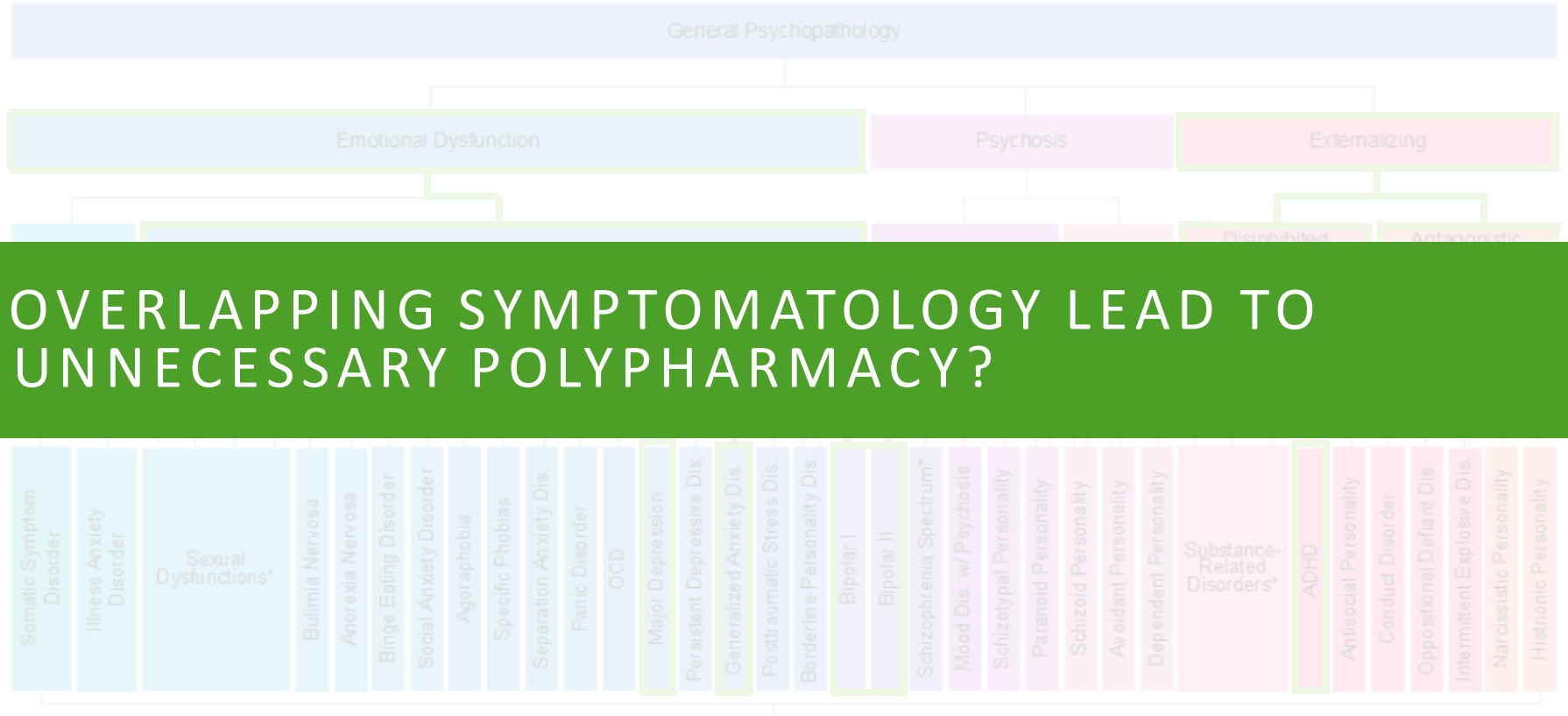
OVERLAPPING SYMPTOMATOLOGY

Psychiatric conditions are complicated



HOW CAN OVERLAPPING SYMPTOMATOLOGY LEAD TO UNNECESSARY POLYPHARMACY?

Image adapted from Forbes MK. Implications of the symptom-level overlap among DSM diagnoses for dimensions of psychopathology. *Journal of Emotion and Psychopathology*. 2023;1(1):104-112.

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CASE NOTES

- John is a 61-year-old male with history of BD-1.
- Uncontrolled symptoms of **anxiety, insomnia, mania, and involuntary movement.**

WHAT IS THE PROBLEM?

UNNECESSARY POLYPHARMACY

WHAT IS THE PLAN?

ELIMINATE UNNECESSARY OR POSSIBLY HARMFUL MEDICATIONS

CURRENT MEDICATIONS

Atomoxetine	ADHD
Bupropion	ADHD (?) BD (?)
Buspirone	ANXIETY
Cariprazine	BD
Deutetrabenazine	TREMOR
Lamotrigine	BD
Propranolol	ANXIETY (?)
Trazodone	INSOMNIA (?)

*(?) indicate an indication not FDA-approved

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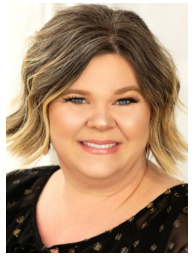
KEY POINT

OVERLAPPING SYMPTOMATOLOGY

Rather than focusing on individual symptoms, **prioritize understanding the patient's condition as a whole**

CASE NOTES

- John is a 61-year-old male with history of BD-1.
- Uncontrolled symptoms of **anxiety, insomnia, mania, and involuntary movement.**



✓ **Evaluate breakthrough symptoms and side effects**

(e.g., accurate history taking, subjective questionnaires)

✓ **Assess adherence to medication regimen**

(e.g., patient, caregiver, friends/family, prescription refills)

✓ **Consider objective evaluations when appropriate**

(e.g., therapeutic drug monitoring)

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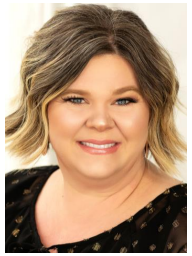
HOW WOULD YOU EVALUATE THE EFFICACY OF JOHN'S CURRENT MEDICATION REGIMEN AND SCREEN FOR ADVERSE EFFECTS?

EVALUATION OF SIDE EFFECTS

DRUG-INDUCED MOVEMENT DISORDERS



ONSET OF SYMPTOMS:

- ✓ **1 year prior:** slight jaw and mouth movements
- ✓ **Started on deutetrabenazine:** began to exhibit symptoms of tremor, stiffness, and shuffling gait

WHAT'S THE DIAGNOSIS? DIP; TD

	AKATHISIA	DYSTONIA	DRUG INDUCED PARKINSONISM (DIP)	TARDIVE DYSKINESIA (TD)
Onset	**Acute**[1] Hours or days	**Acute**[2] Hours or days	**Acute or subacute**[3] Hours, days, or weeks	***Delayed***[3] Weeks, months, years
Symptoms	**Restlessness**	**Sustained or intermittent muscle contractions**	**Parkinsonism**	**Arrhythmic involuntary athetoid or choreiform movements**

DIMDs: drug-induced movement disorders; **DIP:** drug-induced parkinsonism; **TD:** tardive dyskinesia

1. Pringsheim T et al. The assessment and treatment of antipsychotic-induced akathisia. *Can J Psychiatry*. 2018;63(11):719-729. **2.** Stroup TS et al. Management of common adverse effects of antipsychotic medications. *World Psychiatry*. 2018;17(3):341-356. **3.** Ward KM et al. Antipsychotic-related movement disorders: drug-induced parkinsonism vs. tardive dyskinesia-key differences in pathophysiology and clinical management. *Neurol Ther*. 2018;7(2):233-248.

EVALUATION OF SIDE EFFECTS

DRUG-INDUCED MOVEMENT DISORDERS

Are current meds contributing to the involuntary movements?

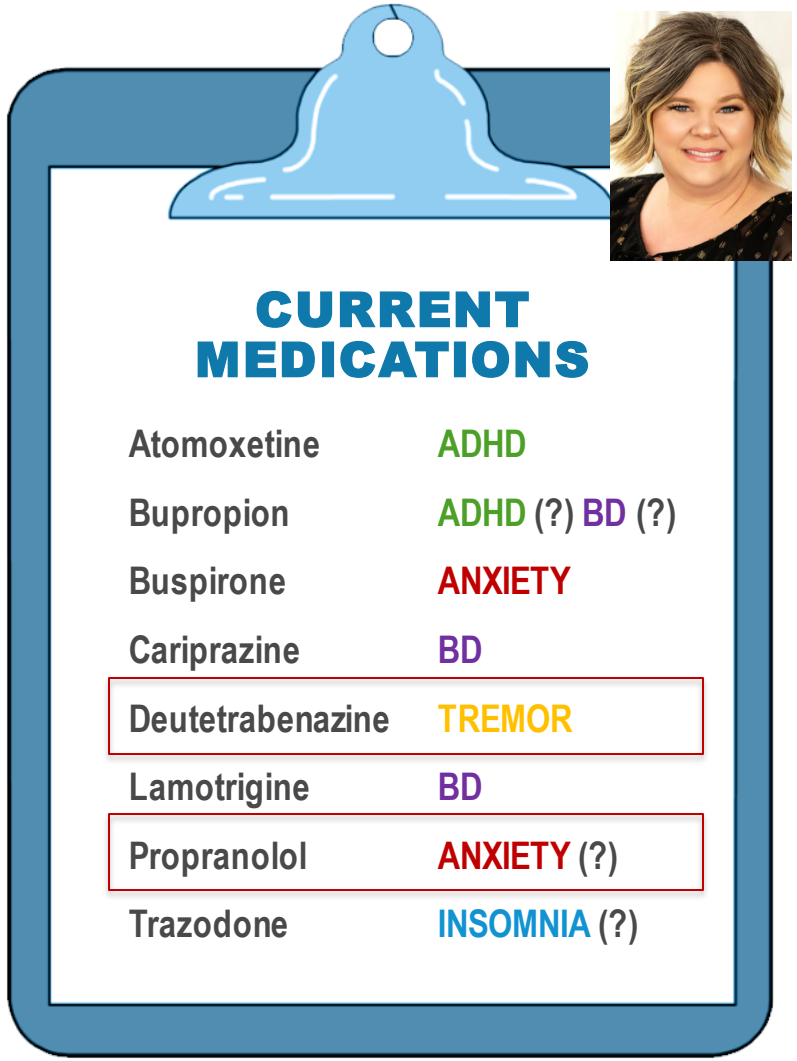
✓ **Deutetrabenazine** and **Propranolol**

Is the best pharmacological management in place?

✓ With a diagnosis of both TD and DIP, **treat the DIP first**

How would you monitor John's progress?

✓ Follow-up **every two weeks** to monitor for improvement



STAY TUNED FOR OUR LECTURE ON **EXTRAPYRAMIDAL SYMPTOMS** TO DIVE DEEPER INTO DIMDS

OBJECTIVE EVALUATION

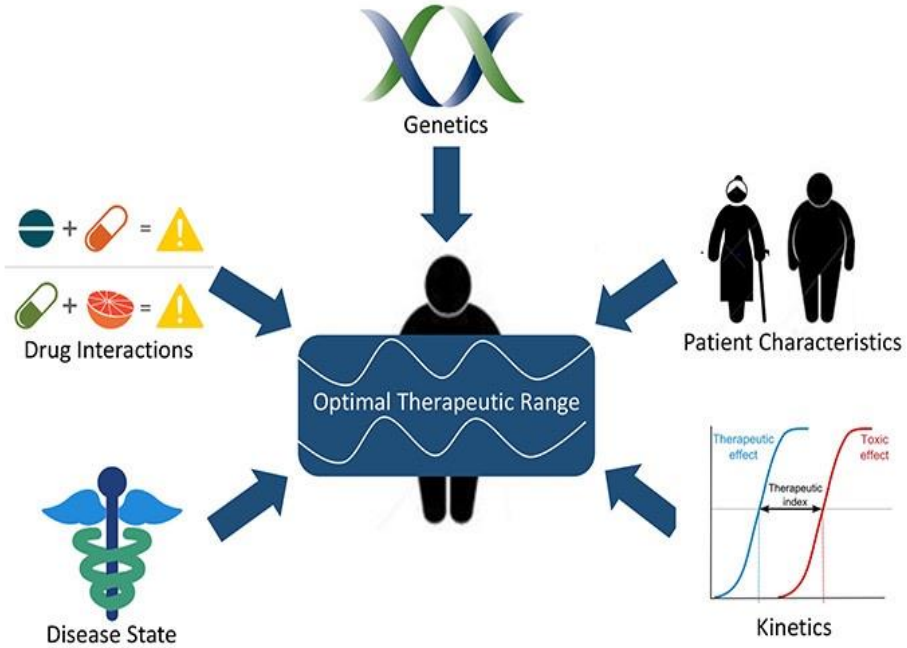
THERAPEUTIC DRUG MONITORING (TDM)

TDM is the quantification and interpretation of drug concentrations in blood to optimize pharmacotherapy[1]

Goals of comprehensive TDM[2]

- ✓ Improve medication adherence
- ✓ Reconcile medical record: Patients take many medications that are not in the medical record
- ✓ Address medications outside of therapeutic reference range

MEASURING MEDICATION EXPOSURE[2]



WHAT IS THE CURRENT RECOMMENDED USE OF TDM IN CLINICAL PRACTICE? HOW CAN IT OPTIMIZE PATIENT OUTCOMES?

1. Hiemke C et al. Consensus Guidelines for Therapeutic Drug Monitoring in Neuropsychopharmacology: Update 2017 *Pharmacopsychiatry*. 2018;51(1-02):9-62.
2. Sutherland JJ et al. Managing Psychotropic Medications in Complex, Real-World Patients Using Comprehensive Therapeutic Drug Monitoring. *ACS Chem Neurosci*. 2017;8(8):1641-1644.

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OBJECTIVE EVALUATION

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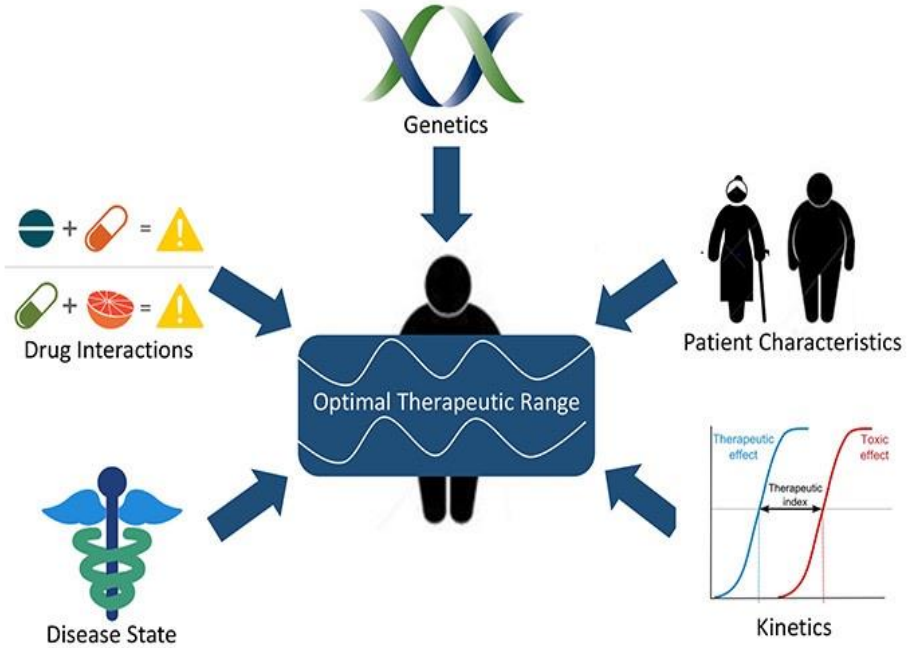

STAY TUNED FOR OUR LECTURE ON **MAJOR DEPRESSIVE DISORDER** TO DIVE DEEPER INTO TDM

1. Hiemke C et al. Consensus Guidelines for Therapeutic Drug Monitoring in Neuropsychopharmacology: Update 2017 *Pharmacopsychiatry*. 2018;51(1-02):9-62.
2. Sutherland JJ et al. Managing Psychotropic Medications in Complex, Real-World Patients Using Comprehensive Therapeutic Drug Monitoring. *ACS Chem Neurosci*. 2017;8(8):1641-1644.

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AUDIENCE POLL

Of the following options, which would be your plan for John's prescription of bupropion 150mg: 2 PO AM; 1PO PM?

a) Continue at the current dose and frequency.

b) Continue, but at a lower dose.

c) Increase the dose.

d) Titrate down the dose and ultimately discontinue.

e) Immediately discontinue.

f) I do not know/ I am unsure.

UNDERSTANDING POLYPHARMACY

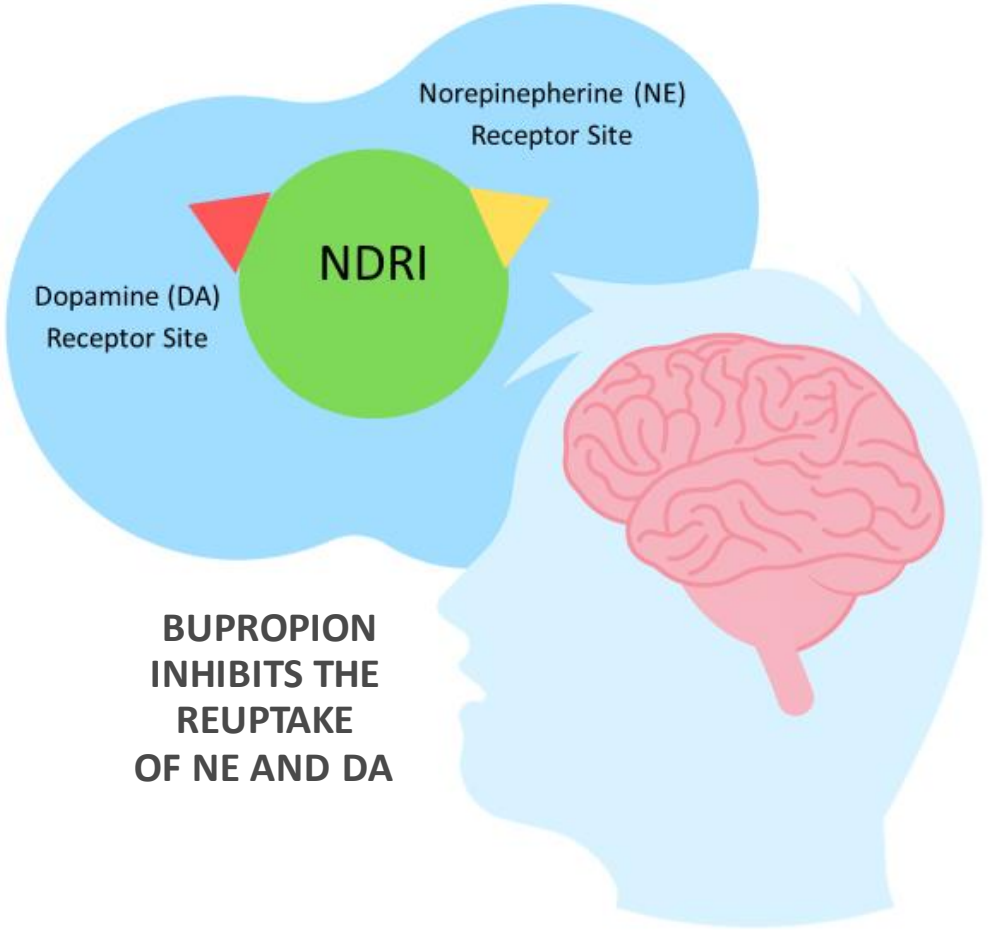
BUPROPION

NOREPINEPHRINE-DOPAMINE REUPTAKE INHIBITOR (NDRI)

COMMONLY PRESCRIBED FOR:

- **Major depressive disorder (MDD)***
- **Seasonal affective disorder (SAD)***
- **Nicotine addiction***
- BD
- ADHD

***FDA approved**



1. Stahl SM et al. *Stahl's Essential Psychopharmacology: Prescriber's Guide*. Cambridge University Press; 2021.

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CASE NOTES

- John is a 61-year-old male with history of BD-1.
- Uncontrolled symptoms of **anxiety, insomnia, mania, and involuntary movement.**

WHY MAY BUPROPION NOT BE THE BEST MEDICATION FOR JOHN?

- ✓ May induce symptoms of **mania**[1]
- ✓ Side effects are probably caused in part by actions of norepinephrine and dopamine, leading to undesired effects such as **insomnia**, **tremor**, **agitation**, headache, and dizziness[1]
- ✓ Associated with movement disorders[2]

1. Stahl SM et al. *Stahl's Essential Psychopharmacology: Prescriber's Guide*. Cambridge University Press; 2021. **2.** Pitton Rissardo J et al. Bupropion-Associated Movement Disorders: A systematic review. *Annals of Movement Disorders*. 2020;3(2):86.

AUDIENCE POLL

Of the following options, which would be your plan for John's prescription of trazodone 200mg: 1 PO QHS?

a) Continue at the current dose and frequency.

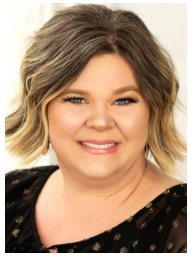
b) Continue, but at a lower the dose.

c) Increase the dose.

d) Titrate down the dose and ultimately discontinue.

e) Immediately discontinue.

f) I do not know/ I am unsure.



UNDERSTANDING POLYPHARMACY

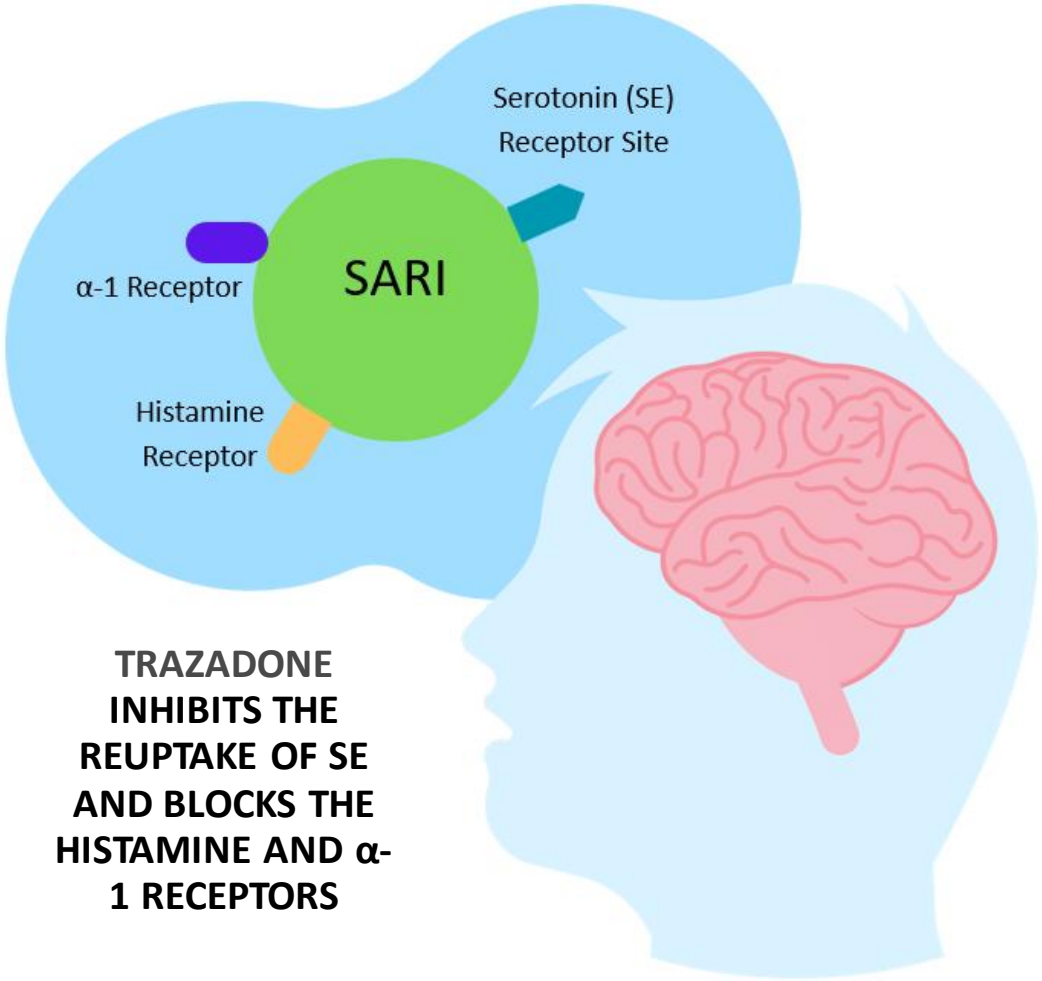
TRAZODONE

SEROTONIN 2 ANTAGONIST/ REUPTAKE INHIBITOR (SARI)

COMMONLY PRESCRIBED FOR:

- **Major depressive disorder (MDD)***
- Insomnia (primary and secondary)
- Anxiety

***FDA approved**



TRAZADONE INHIBITS THE REUPTAKE OF SE AND BLOCKS THE HISTAMINE AND α-1 RECEPTORS

1. Stahl SM et al. *Stahl's Essential Psychopharmacology: Prescriber's Guide*. Cambridge University Press; 2021.

CASE NOTES

- John is a 61-year-old male with history of BD-1.
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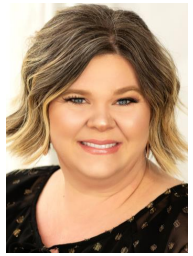

WHY MAY TRAZODONE NOT BE THE BEST MEDICATION FOR JOHN?

- ✓ Some recent clinical guidelines do not recommend its use for treating insomnia[1]
- ✓ May induce symptoms of **mania**[2]
- ✓ Combinations with other antidepressants may activate bipolar disorder and suicidal ideation[2]

1. Pelayo R et al. Should Trazodone Be First-Line Therapy for Insomnia? A Clinical Suitability Appraisal. Journal of Clinical Medicine. 2023; 12(8):2933. **2.** Stahl SM et al. *Stahl's Essential Psychopharmacology: Prescriber's Guide*. Cambridge University Press; 2021.

CASE

WHAT DO WE DO?

MEDICATION LIST

~~**Atomoxetine** 40mg: 1 PO QD~~

Bupropion 150mg: 2 PO AM; 1PO PM → **LOWER** (150mg BID)

~~**Buspirone** 10mg: 1 PO TID~~

Cariprazine 3mg: 1 PO QD

Deutetrabenazine 12mg: 2 PO BID → **LOWER IF SYMPTOMS CONTINUE AFTER OTHER MEDS ARE LOWERED**

~~**Lamotrigine** 200mg: 1 PO BID~~ → **LOWER -> DISCONTINUE**

Propranolol 20mg: 1 PO TID → **TID -> BID**

Trazodone 200mg: 1 PO QHS → **LOWER** (100mg PO QHS)

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CAN WE KILL MULTIPLE BIRDS WITH ONE STONE?

COULD CERTAIN MEDICATIONS HAVE A POSITIVE IMPACT ON MORE THAN ONE OF JOHN'S SYMPTOMS?

MEDICATION LIST

~~**Atomoxetine** 40mg: 1 PO QD~~

Bupropion 150mg: 2 PO AM; 1PO PM

~~**Buspirone** 10mg: 1 PO TID~~

Cariprazine 3mg: 1 PO QD

Deutetrabenazine 12mg: 2 PO BID

~~**Lamotrigine** 200mg: 1 PO BID~~

Propranolol 20mg: 1 PO TID

Trazodone 200mg: 1 PO QHS

CARIPRAZINE

- Cariprazine demonstrated **broad efficacy** across symptoms of depression in bipolar disorder
- A **significantly greater difference in mean change from baseline in MADRS** total score was seen for each cariprazine dose group versus placebo

JOHN'S BREAKTHROUGH SYMPTOMS

Montgomery-Åsberg Depression Rating Scale (MADRS) Individual Items:

Difference for cariprazine 1.5-3.0 mg/d versus placebo[1]

- Apparent sadness***
- Reported sadness***
- **Inner tension**
- **Reduced sleep***
- Reduced appetite***
- Concentration difficulties***
- Lassitude***
- Inability to feel***
- **Pessimistic thoughts****
- Suicidal thoughts*

*P<0.05; **P<0.01; ***P<0.001

STAY TUNED FOR OUR LECTURE ON **BD** TO DIVE DEEPER INTO TREATMENT OPTIONS

1. Yatham LN et al. Broad Efficacy of Cariprazine on Depressive Symptoms in Bipolar Disorder and the Clinical Implications. *Prim Care Companion CNS Disord*. 2020;22(5):20m02611.

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OTHER TRANSDIAGNOSTIC INTERVENTIONS

CASE NOTES

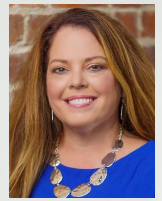
- John is a 61-year-old male with history of BD-1.
- Uncontrolled symptoms of **anxiety, insomnia, mania, and involuntary movement.**

DOES JOHN ALREADY HAVE A CBT SPECIALIST HE SEES REGULARLY?

- **Cognitive behavioral therapy (CBT)** can be effective in treating bipolar disorder and comorbid symptoms (e.g., anxiety)

Don't forget the importance of referring your patient to a CBT specialists if they do not already have an established provider

1. Ellard KK et al. Transdiagnostic treatment of bipolar disorder and comorbid anxiety using the Unified Protocol for Emotional Disorders: A pilot feasibility and acceptability trial. *J Affect Disord*. 2017;219:209-221.



SUMMARY OF KEY POINTS

- ✓ Look at the entire medication list
- ✓ Take the time to deprescribe and streamline medications
- ✓ Prescribe therapies that match your patient's realistic lifestyle
- ✓ Educate the patient and build trust
- ✓ Closely monitor your patient's progress


Q&A