



# Pharmacological Strategies for Bipolar Depression in different care settings

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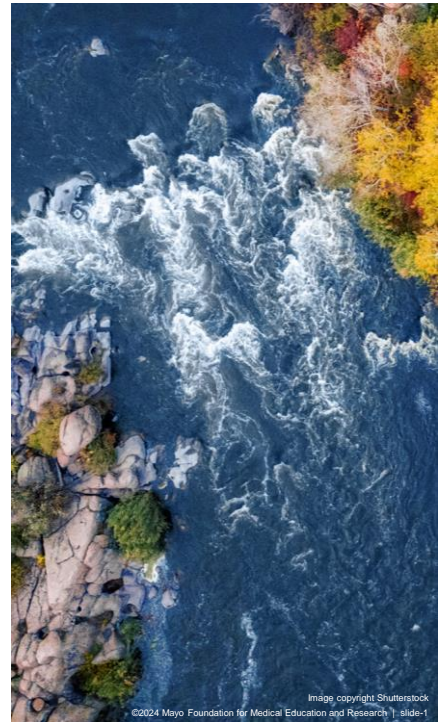
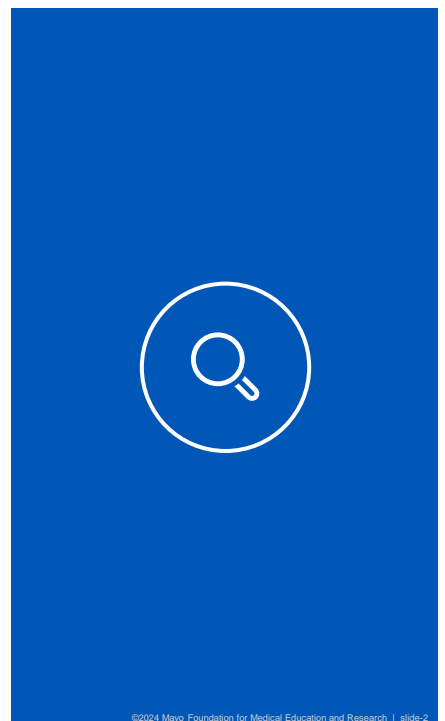


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## LEARNING OBJECTIVES

1. Recognize the **discrepancies** in the delivery of evidence-based treatments for acute bipolar depression across different care settings
2. Identify **opportunities** for optimizing care for acute bipolar depression in primary care settings through education and fostering a conducive environment
3. Explore potential **benefits** of implementing collaborative care models for bipolar depression to enhance treatment outcomes



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## BACKGROUND

Limited evidence of using antidepressants in bipolar disorder (BD)<sup>1</sup>

Different settings including primary care clinic, integrated behavioral health program, and specialty care clinic

Collaborative care established for depression in primary care setting, yet its uncertainty in BD<sup>2</sup>

**Aim of study** - examine pharmacological strategies / patterns for bipolar depression within different care settings.



1. Rhee TG, et al. Am J Psychiatry. 2020;177(8):706-715.
2. Katon W, et al. JAMA. 1995 Apr 5;273(13):1026-31.

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## METHODS (1)

1. Retrospective study in 2020 (IRB 22-003795)
2. Depressive episode captured based on DSM criteria, ICD codes, or symptom burden (PHQ-9  $\geq 10$ )
3. **Pharmacological strategies** initial encounter
  - 1) Continue current regimen
  - 2) Increase dose of current treatment
  - 3) Augmentation
  - 4) Switch to monotherapy of an antidepressant, mood stabilizer, or atypical antipsychotic
  - 5) Combination of the above



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## METHODS (2)

3. **Prescription patterns** measured by use of
  - 1) antidepressants
  - 2) mood stabilizers
  - 3) atypical antipsychotics
4. Multinomial logistic regression to examine association **between clinic settings and initial pharmacological strategies** by measuring marginal effect
  - 1) Generalized estimating equations implementation of logistic regression with an exchangeable correlation structure to
  - 2) examine the association **between clinic settings and prescription patterns** by measuring marginal effect



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## RESULTS (1)

- 217 encounters ( 32 in PC, 53 in IBH, 132 in SC)
- Age = 39.4 years (SD: 14.39)
- Sex ratio (M:F) = 75:142
- 91.7 % of Caucasian
- History of suicide attempt = 31.6%
- History of psychiatric hospitalization = 64.5%
- Psychiatric ED visit in the same year = 9.2%
- PHQ-9 = 17.5 (SD: 4.65)
- GAD-7 = 13.5 (SD: 5.21)
- Bipolar type (I, II, NOS) = 32%, 59%, 9%



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## RESULTS (2)

	Setting	Continue current regimen	Increase dose	Augmentation	Switch to monotherapy	Combination
Counts	PC	22 (69%)	4 (13%)	3 (9%)	2 (6%)	1 (3%)
	IBH	6 (11%)	14 (26%)	15 (28%)	8 (15%)	10 (19%)
	SC	6 (5%)	46 (35%)	19 (14%)	20 (15%)	41 (31%)
Marginal Effect (Percentage Point Change)	PC	-	-	-	-	-
		-	-	-	-	-
	IBH	<b>-57.43%***</b>	13.92%	<b>18.93%*</b>	8.84%	<b>15.74%*</b>
		(-75.92,-38.94)	(-3.81,31.64)	(3.71,34.14)	(-2.71,20.39)	(3.14,28.34)
	SC	<b>-64.20%***</b>	<b>22.35%**</b>	5.02%	8.90%	<b>27.94%***</b>
		(-80.70,-47.70)	(8.29,36.41)	(-6.74,16.78)	(-1.50,19.30)	(17.96,37.91)

PC: Primary care setting, IBH: Integrative behavioral health program, SC: Specialty care setting  
\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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## RESULTS (3)

	Setting	AD Use	MS Use	AP Use
Counts	PC	9 (28%)	19 (59%)	15 (47%)
	IBH	16 (30%)	45 (85%)	39 (74%)
	SC	58 (44%)	114 (86%)	82 (62%)
Marginal Effect (Percentage Point Change)	PC	-	-	-
		-	-	-
	IBH	-2.18%	<b>26.35%***</b>	<b>25.51%**</b>
		(-14.38,10.01)	(12.20,40.51)	(9.39,41.63)
	SC	13.39%	<b>26.13%**</b>	14.74%
		(-1.95,28.73)	(9.99,42.27)	(-3.06,32.54)

PC: Primary care setting, IBH: Integrative behavioral health program, SC: Specialty care setting  
\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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## DISCUSSION

- Strengths
  - First study in a single center
- Limitations
  - Single tertiary academic center
  - Limited sample size
  - Impact of COVID-19 in 2020
- Opportunity to educate primary care providers
  - Potential for PCPs to expand their utilization of mood stabilizers and atypical antipsychotics
- Explore implementing collaborative care model in BD



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## CONCLUSIONS

- Evidence of disparities in pharmacological strategies for BD
- Highlight the need and potential benefit of collaborative care model for BD depression



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# THANK YOU!

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# QUESTIONS & ANSWERS

