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## Introduction

- Mood disorders are common in sickle cell disease (SCD) with an estimated prevalence of 24-30%<sup>1</sup>.
- Depressive symptoms in SCD are associated with more frequent pain episodes, greater distress/interference from pain, and higher acute care utilization<sup>1</sup>.
- Few studies describe models of care for identifying and managing mood disorders as part of comprehensive treatment for SCD<sup>2,3</sup>.

## Objectives

- Describe antidepressant prescribing in a large academic sickle cell center for adults (SCCA) with embedded psychiatrists
- Identify factors associated with antidepressant prescriptions including demographics and prescribing clinicians

## Methods

- Single center retrospective observational study
- Included all patients with encounters in the SCCA from January 1, 2021 to December 31, 2023.
- Center clinicians included 2 hematologists, 2 psychiatrists, and 5 APPs.
- Patient demographics, encounters, and antidepressant prescriptions were collected from the electronic medical record.
- Antidepressant prescriptions were categorized as:
  - Initiating – first antidepressant prescription in greater than 3 months
  - Continuing – subsequent antidepressant prescription(s) for 365 days after the first

## Results

- 28% (200/710) of patients in the SCCA received at least one antidepressant prescription during the study period
  - Patients prescribed antidepressants were more female (69% vs 59%,  $p=0.02$ ), but there was no significant difference in age.
- Patients prescribed antidepressants had a greater mean number of SCCA encounters than those no prescribed antidepressants (mean 15.9 SD 16.4 vs mean 6.2 SD 11.3,  $p<0.00001$ )
  - No-show/cancellation rates were lower for patients prescribed antidepressants (52% vs 55%,  $p<0.001$ )
- 26% (184/710) of patients attended an encounter with the SCCA psychiatrists during the study period
  - No-show/cancellation rates were lower for psychiatrist encounters than other SCCA encounters (46% vs 52%,  $p<0.00001$ )

## Conclusions

- Antidepressants are prescribed, and psychiatric appointments occur for more than a quarter of patients in the SCCA.
- Antidepressant prescriptions were associated with female gender and more encounters in the SCCA.
- Combined, center APPs and hematologists initiated the same number of antidepressant prescriptions as embedded psychiatrists.
- Limitations: retrospective design, antidepressants may be prescribed for other indications than mood, and encounter data does not account for different durations of treatment in the center.

## References

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2. Prince EJ, Carroll CP, Pecker LH, Psychiatric referral and appointment attendance in a clinic for young adults with sickle cell disease. *Pediatr Blood Cancer*, 2024. 71 (4): e30860.
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**Table. Antidepressant Prescriptions for Sickle Cell Center Patients, from initiating prescription to 365 days later**

	Initiating Prescription	Continuing Prescription	Total Prescriptions
<b>Prescriptions, n (%)</b>	142 (100)	430 (100)	572 (100)
Center advanced practice provider	25 (18)	127 (30)	152 (27)
Center psychiatrist	46 (32)	189 (44)	235 (41)
Center hematologist	20 (14)	9 (2)	29 (5)
Other clinician <sup>a</sup>	51 (36)	105 (24)	156 (27)
Selective Serotonin Reuptake Inhibitor (SSRI)	29 (20)	128 (30)	157 (27)
Serotonin Norepinephrine Reuptake Inhibitor (SNRI)	72 (51)	173 (40)	245 (43)
Tricyclic Antidepressant (TCA)	14 (10)	32 (7)	46 (8)
Other <sup>b</sup>	27 (19)	97 (23)	124 (22)

a. Other clinicians include primary care and hospital discharge prescriptions.  
 b. Other antidepressants include bupropion, mirtazapine, and trazodone

## Future Directions

- Development of model for mood disorder treatment in comprehensive SCD care.
- Outcomes of antidepressant prescribing, utilization, depressive symptoms, care engagement.
- Trajectory of prescriptions and other psychiatric medication prescriptions.

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## Disclosures and Contact

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