Antidepressant Treatment Patterns among Patientswith Postpartum Depression in a US Claims Database



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Background

- Postpartum depression (PPD) is a subdiagnosis of major depressive disorder and affects 10-20% of women after childbirth in the US.¹
- While treatment patterns for major depressive disorder have been well-characterized, treatment patterns for PPD are not, even though antidepressants are recommended to treat both conditions.
- The objective of this study was to characterize the type, duration, and quantity of antidepressant therapies in patients with PPD.

Methods

- We conducted a descriptive analysis of a US-based open claims database (Symphony Health).
- Patients included had an ICD-10 code for delivery (Z37.x) from January 2016-December 2017 and for PPD (F53) within 180 days of delivery.
- Prescription fills of antidepressants and other medications used to treat depression in the 365 days after initial PPD diagnosis were used to characterize treatment patterns.

Results

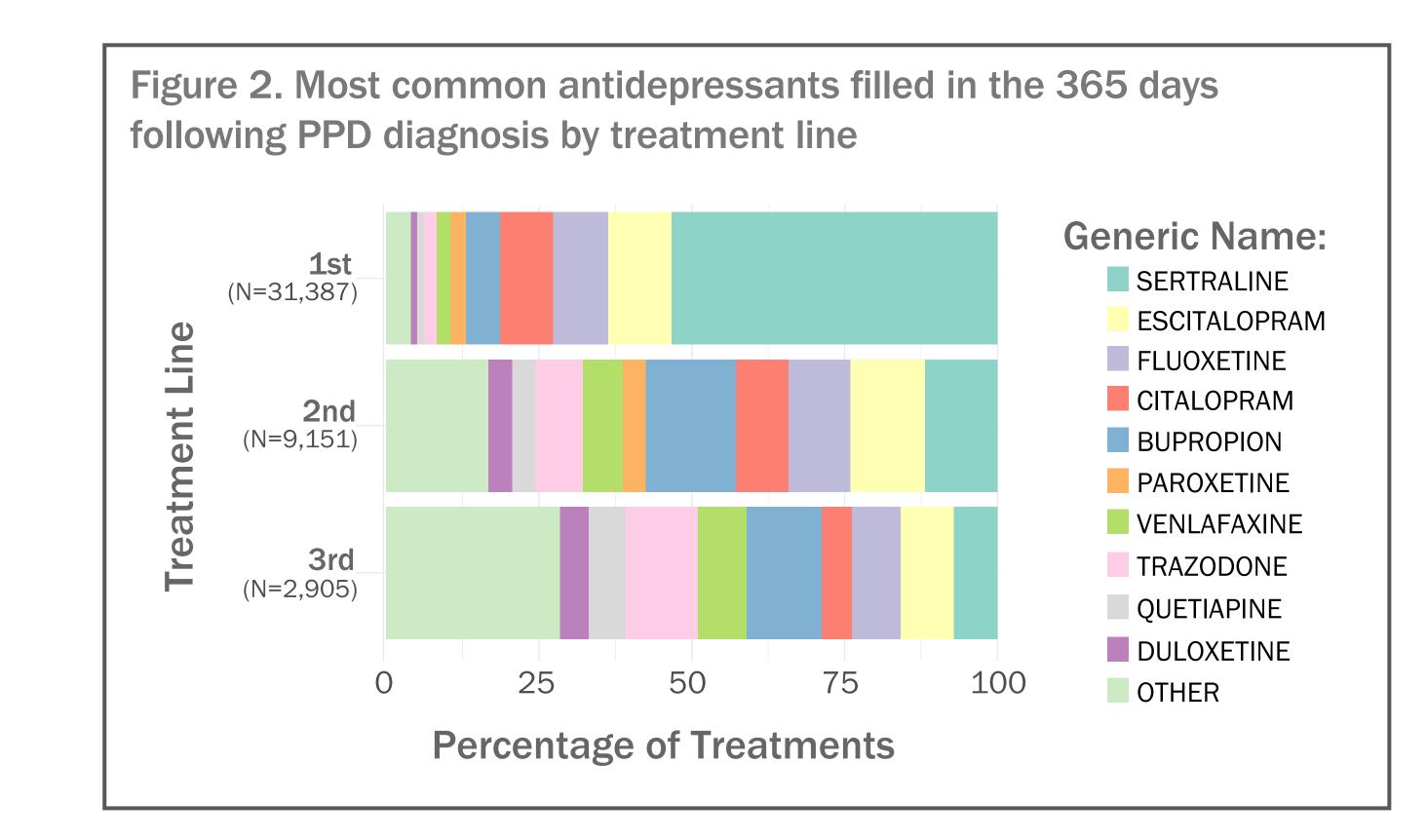
Table 1. Postpartum Depression Cohort Characteristics

Characteristic	All Patients with PPD
Total patients	46,346
Age at delivery, years	
Mean (SD)	27.9 (5.8)
Median (IQR)	28.0 (23.0 - 32.0)
US Census region, n (%)	
Midwest	16,025 (34.6%)
Northeast	5,758 (12.4%)
South	16,584 (35.8%)
West	7,797 (16.8%)
Unknown	182 (0.4%)
Birth type, n (%)	
Live birth	44,723 (96.5%)
Stillbirth	585 (1.3%)
Unknown	1,038 (2.2%)
Time to index PPD dx, days	
Mean (SD)	54.3 (41.4)
Median (IQR)	44.0 (23.0 - 74.0)
Plan type at index PPD dx, n (%)	
Self-pay	89 (0.2%)
Commercial	32,342 (69.8%)
Government-funded (Medicaid,	12,225 (26.3%)
Medicare, etc.)	(
Unknown	1,690 (3.6%)

PPD, postpartum depression; SD, standard deviation; IQR, interquartile range; dx, diagnosis

- The study cohort consisted of 46,346 patients. The median time from delivery to first PPD diagnosis was 44 days (interquartile range: 23 74 days) (Table 1).
- Among patients with PPD, 30,331/46,346 (65.4%) filled at least one antidepressant prescription in the 365 days after diagnosis.
 - No substantial differences in age, region, birth type, or insurance type were observed between patients who filled an antidepressant prescription and those who did not.
- The median time from PPD diagnosis to first antidepressant fill was 0 days (interquartile range: 0 - 15 days).
- While 49.3% of patients who filled an antidepressant still had an active prescription 180 days after the first fill, 24.3% of patients had one fill in the database and no additional fills.
- In the 365 days after PPD diagnosis, 30.8% of antidepressant-treated patients received two or more distinct antidepressants, and 10.8% received three or more distinct antidepressants (Figure 1).
- Sertraline was the most filled first-line antidepressant (53.3%) (Figure 2).
- Later-line therapies were not dominated by any single antidepressant and consisted of 40 different medications (Figure 2).

Figure 1. Proportion of patients with PPD filling distinct antidepressant medications over time 100% Proportion of Patients who filled any 34.6% Antidepressant 75% 100% 75% 50% 69.2% 45.3% 50% 25% 25% 20.0% 13.1% 10.8% 365 300 Days since PPD diagnosis **Distinct Antidepressant Fills:** 0 1 2 3+



Conclusions

- PPD treatment patterns are heterogeneous.
- Among patients treated with antidepressants, about 1 in 4 filled only once, suggesting discontinuation.
- About 1 in 10 patients treated with antidepressants received 3 or more distinct medications in the year after diagnosis, suggesting that the initial medication prescribed was not effective.
- Sertraline was the most common first-line treatment, but no clear treatment choice was apparent if first-line treatment failed.
- Like major depression², PPD treatment patterns appear to be characterized by antidepressant medication discontinuation and switching.

References

- 1. Wang Z. et al. *Transl Psychiatry* (2021) Oct 20;11(1):543
- 2. Kern, D.M. et al. *BMC Psychiatry* (2021) Dec 6;21(1):608