

Persistence Patterns of Antidepressants in Mood, Anxiety, and Related Disorders: A Retrospective Cohort Study

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BACKGROUND

- Mood, anxiety, and related disorders affect approximately 10% of the Canadian population.
- Antidepressants are effective for the treatment of moderate to severe forms of these disorders.
- Fewer than half of the individuals do not respond satisfactorily to the first antidepressant prescribed, and >50% of patients prematurely discontinue antidepressants.
- Practice guidelines recommend that antidepressants be continued for at least 6 to 12 months after symptom remission.
- Real-world persistence data of antidepressants is limited.

OBJECTIVES

- To determine the proportion of individuals who persist with their first antidepressant prescription at multiple time points**
- To determine the factors associated with long-term antidepressant persistence**

METHODS

- Population-based cohort study using admin data from the Population Health Research Data Repository housed at the Manitoba Centre for Health Policy (MCHP)
- AD Persistence:** Continuous days-supply of a prescription with no gap >60 days between the last day of the days-supply provided and the first day of the prescription refill
- Multiple multivariable logistic regression models were used to estimate variables linked to AD persistence

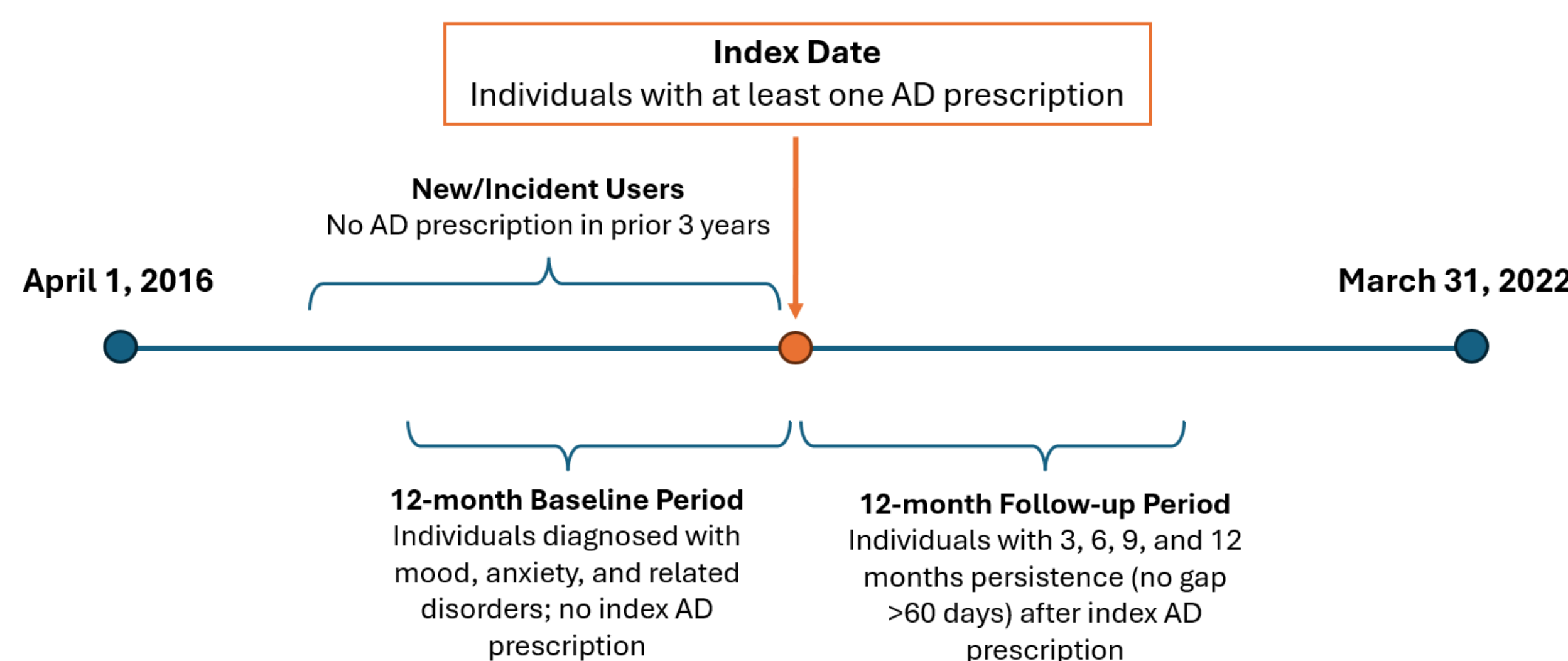


Fig 1: Overview of study timeline (AD = Antidepressants).

RESULTS

Table 1: Antidepressant persistence based on the characteristics of the population (N = 76,200)

Characteristics		No. of Subjects, N (%)	Persistence [adjusted OR (95% CI)]			
			3 months	6 months	9 months	12 months
Biological sex	Female	48,212 (63.27)	-	-	-	-
	Male	27,988 (36.73)	0.91 (0.88-0.93)	0.86 (0.84-0.89)	0.86 (0.83-0.89)	0.87 (0.84-0.90)
Age groups	25-65 years	47,492 (62.32)	-	-	-	-
	<25 years	21,658 (28.42)	1.04 (1.00-1.07)	0.89 (0.86-0.92)	0.80 (0.77-0.83)	0.74 (0.71-0.77)
	>65 years	7,050 (9.25)	0.90 (0.86-0.95)	0.93 (0.88-0.99)	1.00 (0.94-1.06)	1.11 (1.05-1.18)
Residence	Rural	28,112 (36.89)	-	-	-	-
	Urban	48,088 (63.11)	1.02 (0.94-1.10)	0.98 (0.91-1.06)	0.93 (0.86-1.01)	0.94 (0.86-1.03)
Antidepressants used for the first Rx	SSRIs	53,079 (69.66)	-	-	-	-
	SNRIs	9,397 (12.33)	0.87 (0.83-0.91)	0.97 (0.93-1.01)	1.03 (0.99-1.08)	1.10 (1.05-1.16)
	TCAs	4,968 (6.52)	0.34 (0.32-0.36)	0.29 (0.27-0.31)	0.29 (0.27-0.32)	0.31 (0.28-0.34)
	Others	8,756 (11.49)	0.52 (0.49-0.55)	0.50 (0.47-0.52)	0.49 (0.47-0.52)	0.51 (0.48-0.54)
Concurrent benzodiazepine use		17,374 (22.80)	0.94 (0.89-1.00)	0.93 (0.88-0.99)	0.93 (0.88-0.99)	0.95 (0.89-1.01)
Concurrent opioid use		6,468 (8.49)	0.81 (0.78-0.84)	0.83 (0.80-0.86)	0.86 (0.82-0.89)	0.88 (0.84-0.91)
OCD diagnosis 1 year before index Rx		399 (0.52)	1.50 (1.21-1.86)	1.49 (1.22-1.82)	1.60 (1.31-1.96)	1.63 (1.32-2.01)
PTSD diagnosis 1 year before index Rx		3,446 (4.52)	0.86 (0.80-0.92)	0.83 (0.77-0.89)	0.82 (0.75-0.82)	0.83 (0.76-0.91)

SSRIs = Selective serotonin reuptake inhibitors, SNRIs = Serotonin and norepinephrine reuptake inhibitors, TCAs = Tricyclic antidepressants, OCD = Obsessive-compulsive disorder, OR = Odds ratio, PTSD = Post-traumatic stress disorder, Rx = Prescription, Significance level: $p < 0.05$ (bold).

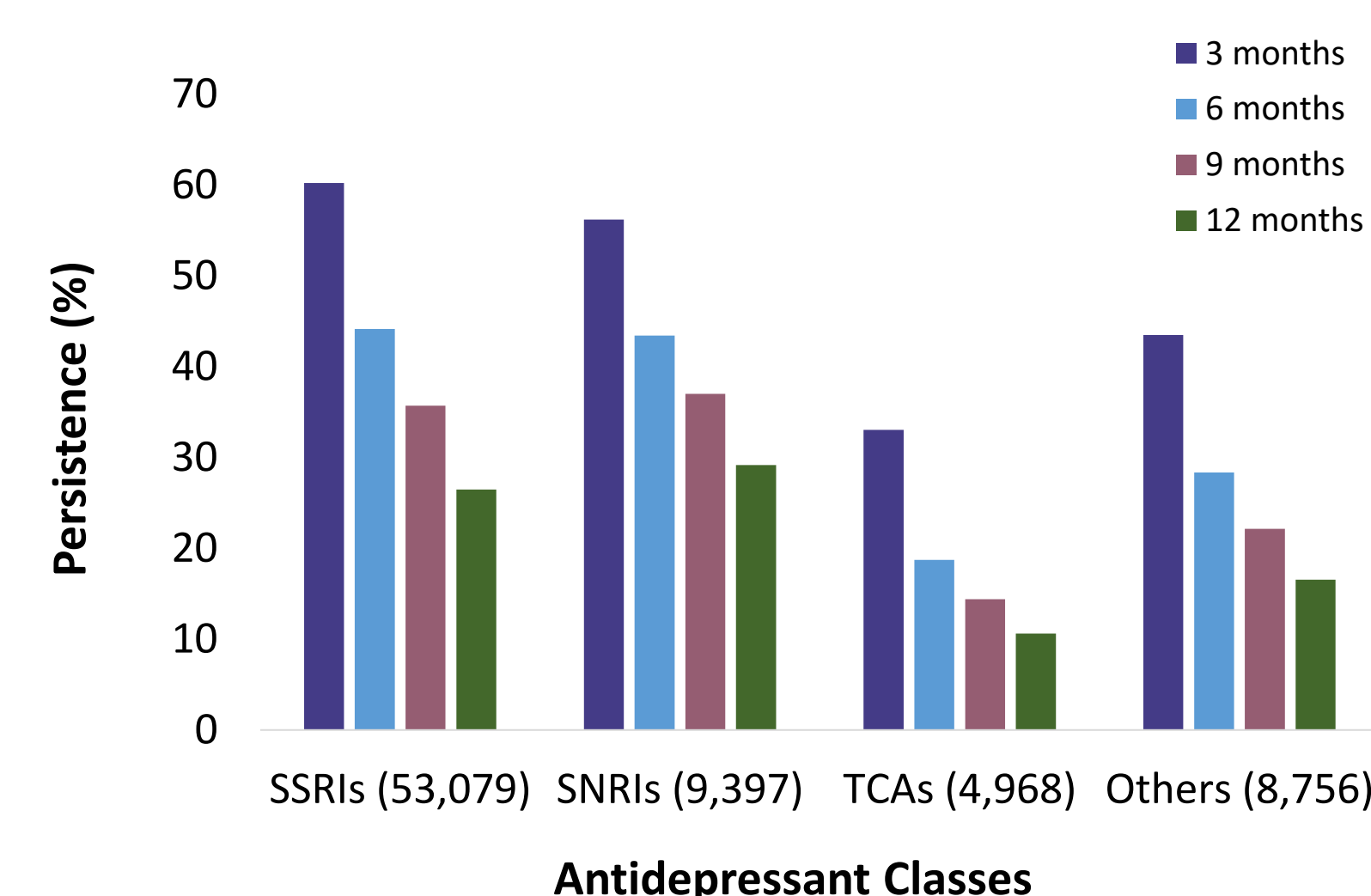


Fig 2: Antidepressant persistence by class over time.

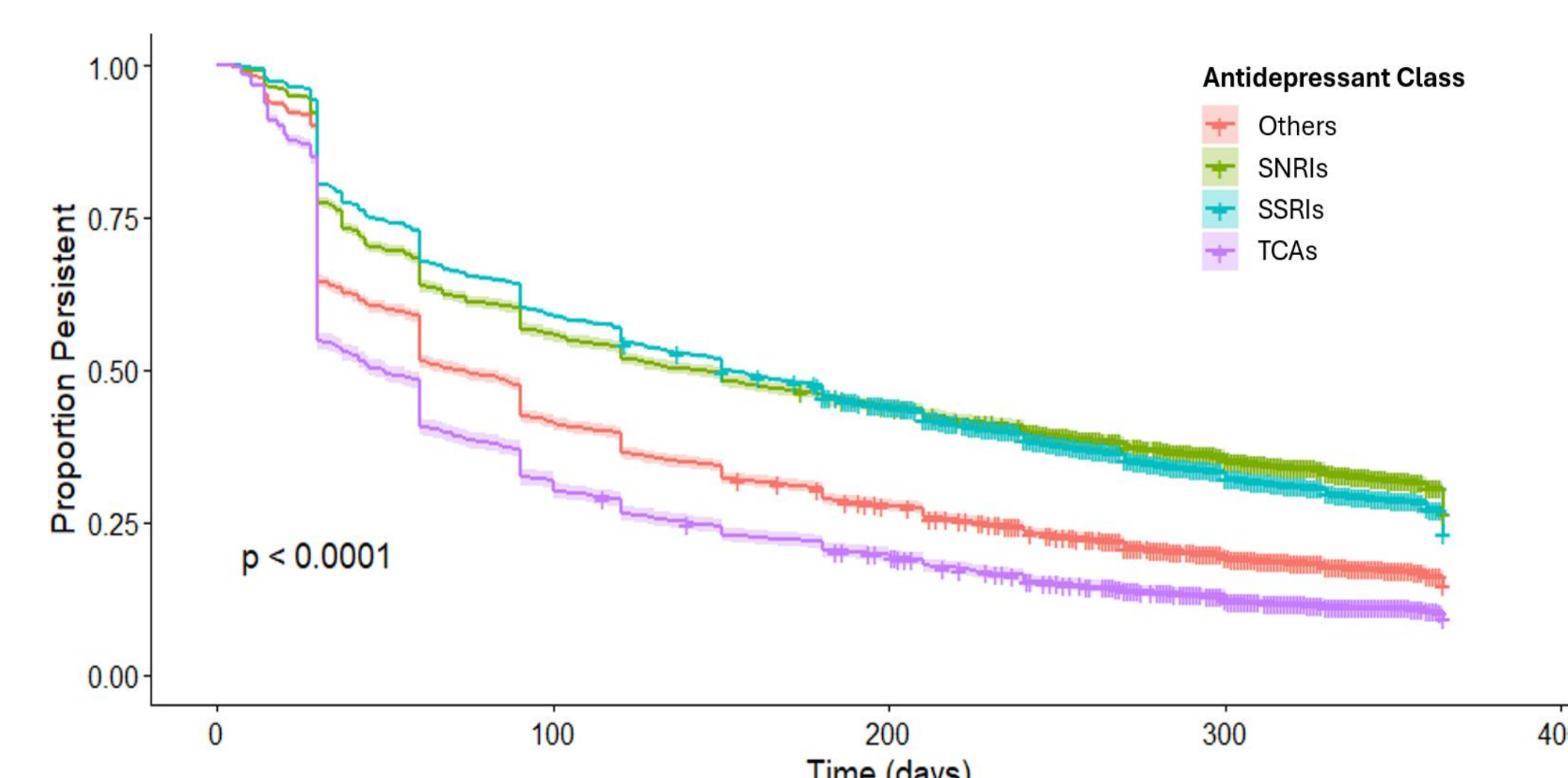


Fig 3: Time-to-discontinuation of ADs by therapeutic class.

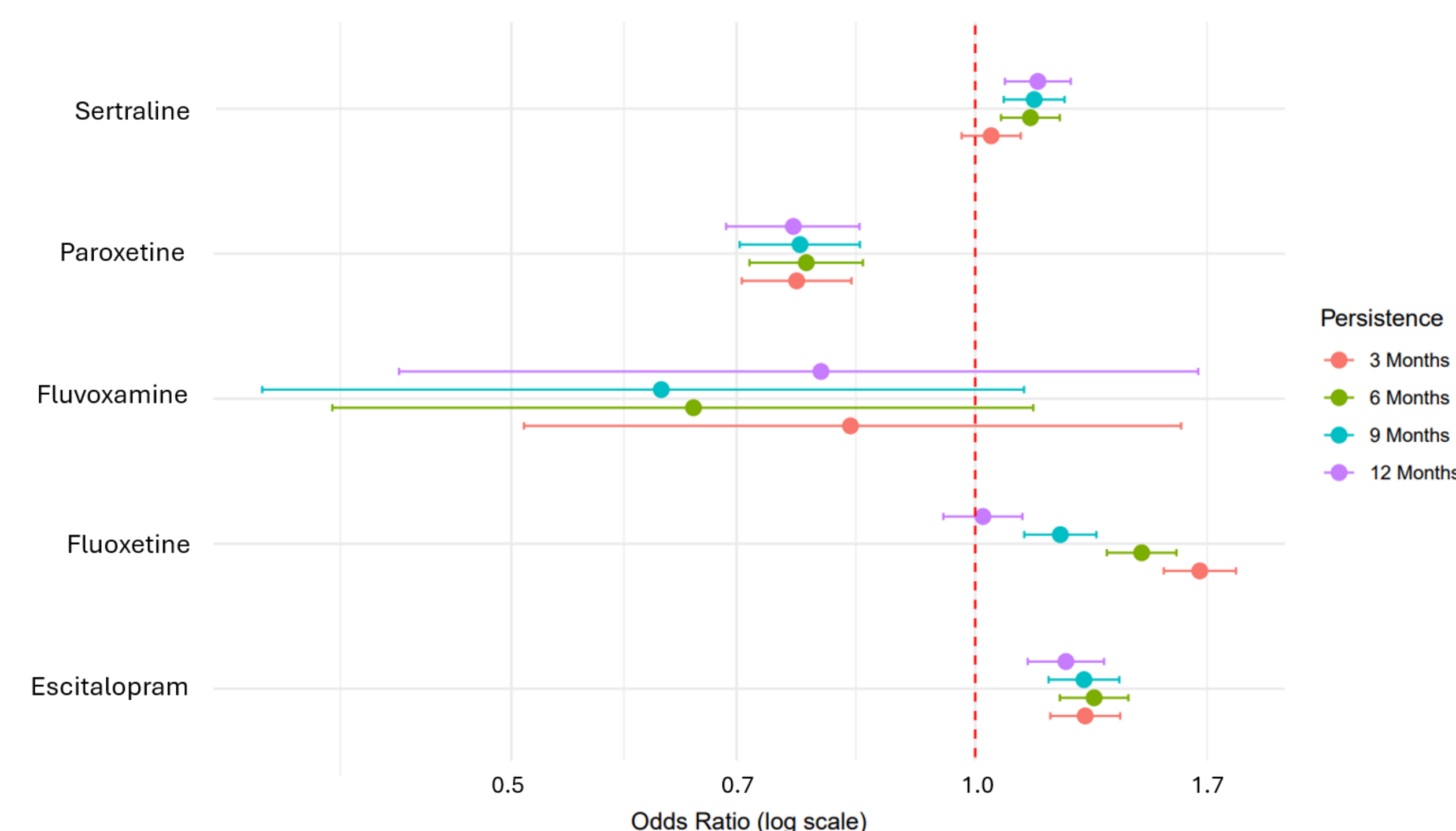


Fig 4: Persistence based on the individual SSRIs over time [Ref (citalopram) OR = 1.0].

CONCLUSIONS

- Our study showed that almost half of the individuals did not persist with antidepressant therapy at 3 months, and the proportion of individuals who persisted with their initial antidepressants declined over 3, 6, 9, and 12 months.
- Individuals with SSRIs showed greater persistence compared to SNRIs, TCAs, and other classes of antidepressants.
- Being male, younger and older, and concurrent opioid and BDZ users were associated with lower persistence over time.

SIGNIFICANCE

- This is the first cohort study in Manitoba that provides the real-world persistence data of antidepressants in mood and anxiety disorders.
- The findings provide clinicians and policymakers with new information about the factors influencing antidepressant persistence.
- Further investigation into the factors associated with lower persistence is warranted.

ACKNOWLEDGEMENTS



REFERENCES

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