BRIEF REPORT

Antidepressant Tapering Is Not Routine But Could Be

James Phelps, MD, James Nguyen, BA, and Olivia Pipitone Coskey, MPH

Introduction: When antidepressants are discontinued, severe withdrawal symptoms are possible. Some patients have few or no problems stopping, whereas others struggle. That struggle can be minimized or prevented with careful dose tapering. How often is that done?

Methods: Using 7 years of medical records, we determined the percentage of patients who received a prescription for the lowest available dose of their antidepressant before it was discontinued, as an indicator of a deliberate taper.

Results: Over that period, 8.9% of patients had evidence of tapering. The percentage increased from 4.9% in 2014 to a plateau around 10% in the past 4 years.

Discussion: While reports of severe withdrawal are increasingly recognized and must be addressed, our data suggest that many patients can discontinue their antidepressants without a taper through the lowest dose. However, it is difficult to identify which patients will struggle without a careful taper. A "one-size-fits-all" taper approach is recommended, balancing the need for withdrawal prevention with the need to avoid unnecessary complexity for the majority of patients. The first decrement is key for all patients: it must go well. Thereafter many patients may accelerate but all should receive a prescription for the lowest available dose of their antidepressant. (J Am Board Fam Med 2023;00:000–000.)

Keywords: Antidepressants, Anxiety Disorders, Bipolar Disorder, Depression, Drug Tapering, Mental Health, Primary Health Care, Psychiatry

Introduction

Antidepressants are widely used, 1 yet there is increasing concern that many people experience severe withdrawal symptoms (eg, anxiety/panic and irritability) when they attempt to stop these medications.^{2,3} The frequency of severe withdrawal experiences has been intensely debated, 4,5 but with thousands of personal accounts online⁶ there is no doubt that antidepressant discontinuation can be extremely debilitating.

The severity of antidepressant withdrawal can be mitigated by carefully tapering the dose before stopping. Research is ongoing regarding which patients need a taper⁷ and the best way to discontinue their antidepressants.8 Most strategies emphasize use of very small decrements in the last steps to zero.^{9,10} To examine the extent to which these strategies have been adopted in clinical practice in the past 7 years, we investigated the frequency of prescribing the smallest available dose before antidepressant discontinuation. We hypothesized that less than half of patients whose antidepressant was stopped would exhibit this evidence of small-step tapering.

This article was externally peer reviewed. Submitted 10 July 2022; revised 14 September 2022; accepted 19 September 2022.

This is the Ahead of Print version of the article.

From Samaritan Mental Health, Samaritan Health Services, Corvallis, Oregon (JP); Western University School of Medicine, Lebanon, Oregon (JN); Graduate Medical Education, Samaritan Health Services, Corvallis, Oregon

Funding: This study received no external funding.

Conflict of interest: Dr. Phelps reports royalties from McGraw-Hill and W.W. Norton & Co. for books on a related topic. The other authors report no financial relationships with commercial interests.

Corresponding author: James Phelps, MD, Samaritan Mental Health, Samaritan Health Services, Corvallis, Oregon (E-mail: jimp@psycheducation.org).

Methods

The Samaritan Health Services Regional Institutional Review Board reviewed this study and approved it as exempt research. Among patients whose antidepressant prescriptions were discontinued, we examined the dose of the last prescription as an indicator of prescribers' antidepressant tapering practices.

We began by identifying patients who, per electronic health record orders, had ever been prescribed an antidepressant. Tricyclics and trazodone were excluded as they are frequently used at low doses for pain and sleep; otherwise, all routinely used antidepressants were included. We then selected those patients whose prescriptions had been discontinued (defined as having no new medication orders within a 13-month window).

Patients who received prescriptions only at the lowest possible dose were excluded (no dose tapering possible). The sample was then narrowed to include only those who received the same antidepressant for at least 6 months before discontinuation, so that a consideration of tapering on discontinuation would clearly be warranted. Finally, to ensure that antidepressant orders were not discontinued because the patient had moved or sought a new provider outside our system, we excluded patients who had not been seen in 1 of our primary care or behavioral health clinics in more than 13 months.

The rate of tapering was calculated for this final study population and defined as the percentage of patients who received a prescription of the lowest possible dose for their antidepressant medication before they discontinued their medication. Descriptive statistics were used to characterize the study population and to graph taper rates by year of antidepressant medication discontinuation. A linear regression model was used to estimate the annual increase in the percent of patients who were tapered to the lowest possible dose of their medication before discontinuing it. Pearson's χ^2 tests were used to explore whether the distribution of tapering to the lowest available dose significantly differed between long- and short-lived antidepressants. All summary and analyses were performed in R version 3.6.1.

Results

As shown in Figure 1, our final sample included 7583 patients. Table 1 presents demographic and socioeconomic features of the study population. The majority are White or Caucasian (reflecting the ethnic distribution of our region, the rural Pacific Northwest¹¹) and are female, on Medicare,



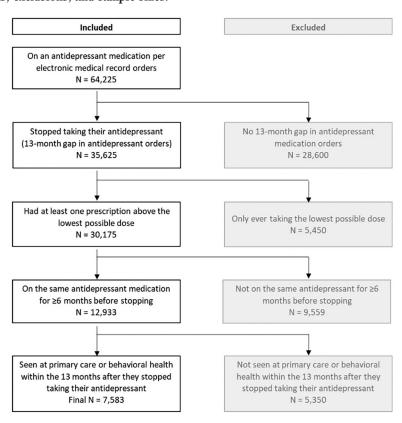


Table 1. Demographics of Study Population, 2014–2021

	Study Populatio N = 7583
Age at time of stopping, mean (SD)	52.6 (20.5)
Age at time of stopping (%)	
<18	6.6%
18 to 39	21.2%
40 to 64	39.6%
65+	32.6%
Female (%)	67.0%
Race (%)	
American Indian or Alaskan Native	1.1%
Asian	0.6%
Black	0.5%
White or Caucasian	95.9%
Other or unknown	1.8%
Ethnicity (%)	
Hispanic or Latino	2.9%
Not Hispanic or Latino	95.4%
Unknown	1.7%
Primary Insurance (%)	
Commercial	27.6%
Medicaid	21.4%
Medicare	45.2%
Other government	1.6%
Self-pay	4.1%

Abbreviation: SD, standard deviation.

and more than 40 years old when antidepressants were discontinued.

Of the 7583 patients, 676 (8.9%) were tapered to the lowest available dose of their antidepressant before it was discontinued. Figure 2 indicates an increase in taper rates, from 4.9% in 2014 (electronic medical record adoption) to 9.5% in 2021 (per linear regression: average increase of 0.73% per year; 95% CI, 0.30-1.2; P=.01), with a plateau around 10% in the past 4 years. As shown in Figure 3, compared with fluoxetine, venlafaxine ER and IR were tapered significantly more often (P<.001 and P=.002, respectively), but paroxetine was not (P>.99).

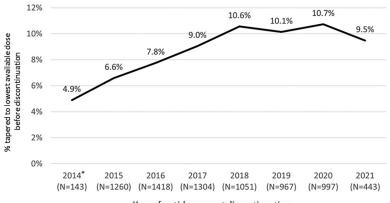
Discussion

In this primary care outpatient sample, only 8.9% of patients whose antidepressants were discontinued received prescriptions for the lowest available dose before stopping. The rate increased from 5% in 2014 but has plateaued around 10% in the past 4 years. Taper rates were not consistently predicted by antidepressants' pharmacokinetics.

Note that although they may have had significant symptoms of withdrawal, it seems that most patients were able to stop taking antidepressants without tapering through low doses. On the other hand, thousands of patients report severe antidepressant withdrawal symptoms even with very small dose reductions. This suggests that some patients clearly require slow, small-decrement antidepressant tapers, whereas others can manage without using a lower dose or with no tapering at all.

Because it will dictate clinical practice, prescribers of antidepressants need to know how many patients need careful, slow tapering. A recent randomized trial suggests the answer is "less than half." In that trial's taper process, doses were cut in half for a month; then that lowered dose was

Figure 2. Percent of sample receiving the lowest available dose over the study period. *Partial data for the year of electronic medical record adoption.



 $Year\, of\, antide pressant\, discontinuation$

25% 20.5% % tapered to lowest available dose 19.9% 20% 18.6% before discontinuation 15% 9.1% 9.0% 10% 7.6% 6.7% 6.3% 5.4% 4.6% 5% 3.8% 0%

Figure 3. Percent of patients receiving the lowest available dose of commonly prescribed antidepressants.

taken every other day for a month, then stopped. By 6 months, less than half of the discontinuation group had dropped out of the protocol, for example, to increase or resume their original dose. Thus, though some may have struggled in the process, the majority of participants successfully discontinued their antidepressant with this simple taper plan. Similarly, our data suggest that a majority of patients manage to discontinue their antidepressant without use of the lowest available doses.

However, many patients in the randomized trial, and in our clinics, might have experienced significant withdrawal symptoms even if these were not severe enough to lead to a change in strategy. A recent review found the incidence of withdrawal during antidepressant discontinuation averaged 56% of patients across 14 studies. While this study has aroused controversy, it is nevertheless clear that a very large number of patients have an arduous course with current taper routines—or lack thereof. Worse yet, differentiating withdrawal from a relapse of the patient's previous illness can be extremely difficult. Symptoms overlap, and time courses can be very similar.

How then should clinicians discontinue antidepressants? Previous withdrawal problems or withdrawal symptoms between doses (particularly common with venlafaxine or paroxetine) help identify some patients who need small, slow decrements. But for the majority of patients, it seems that complex reductions are unnecessary.

Multiple taper strategies have been suggested, and recommended in practice guidelines, though few have been appropriately tested. A "hyperbolic" approach has been suggested, based on positron emission tomography scan receptor occupancy: large initial reductions followed by exponentially smaller decreases especially near zero. Decreasing doses can be facilitated with premade "tapering strips" containing progressively smaller doses, to but these are not widely available.

We suggest a one-size-fits-all taper process, a variation of the hyperbolic approach based on our clinical experience, that balances the needs of patients at risk of severe withdrawal with the need for a simple clinical routine. Patients begin antidepressant discontinuation for different reasons, with different fears and different expectations. Yet they are alike in 1 crucial way: their first dose decrease must go well—no withdrawal effects and no worsening of mood—lest they immediately wish to go back to their original dose, from which it will be even harder to taper later.

Therefore, one should routinely begin tapering with the smallest decrement the patient can easily engineer. In most cases this will require a new prescription for the lowest available dose of the antidepressant. For patients who are anxious about potential relapse or withdrawal, cutting pills in half or even in quarters may be warranted.

After at least 2 weeks at the first step down, some patients will want to proceed with larger and/or more rapid reductions. If they encounter difficulties, they can slow down or even back up a step, but they will know from experience that small steps are manageable. At the other extreme, some patients will discover that even monthly small steps cause significant symptoms and debility. They can make smaller reductions, more slowly, using the liquid versions available for most antidepressants (notably not venlafaxine).

Approaching zero, many patients will need to slow down and proceed by again using the smallest decrements they can manage. Thus one could call this an "S-curve" variation of the hyperbolic approach: a small/ slow step initially, potentially larger/faster steps from there, then small/slow steps again near zero. The developer of the hyperbolic taper acknowledges that an S-curve better describes his usual routine with patients (Mark Horowitz, personal communication, 2022).

(Note that even with this cautious approach, some patients will have severe withdrawal experiences. They may need the method used by many patients with severe withdrawal, reducing doses by as little as 10% of the previous month's dose. This can take several years but has proved necessary for thousands of patients.¹⁷)

Limitations

Our chart review approach cannot detect tapering that used subdivisions of patients' existing doses or dose reductions that did not reach the lowest dose of a given antidepressant. Thus our 10% finding does not reflect the frequency of all tapers, only those that utilized the lowest available dose via a medication prescription. Further, our population is demographically skewed (73% over 40, 95% White) and may not be fully generalizable.

Conclusions

Most outpatients in our system do not receive the lowest available dose when discontinuing their antidepressant. Our data suggest that many patients are able to discontinue without careful tapering. However, because of the high incidence of antidepressant withdrawal, a routine "onesize-fits-all" S-curve taper process is recommended. The Appendix contains a patient handout for this method.

The authors thank Areeba Nasir Zamar, MD for her assistance with data gathering and manuscript preparation.

To see this article online, please go to: http://jabfm.org/content/ 00/0/000.full.

References

- 1. Brody DJ, Gu Q. Antidepressant use among adults: United States, 2015-2018. US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics; 2020.
- 2. Read J. How common and severe are six withdrawal effects from, and addiction to, antidepressants? The experiences of a large international sample of patients. Addict Behav 2020;102:106157.
- 3. Henssler J, Heinz A, Brandt L, Bschor T. Antidepressant withdrawal and rebound phenomena. Dtsch Arztebl Int 2019;116:355-61.
- 4. Davies J, Read J. A systematic review into the incidence, severity and duration of antidepressant withdrawal effects: are guidelines evidence-based? Addict Behav 2019;97:111-21.
- 5. Jauhar S, Hayes J. The war on antidepressants: what we can, and can't conclude, from the systematic review of antidepressant withdrawal effects by Davies and Read. Addict Behav 2019;97:122-5.
- 6. SurvivingAntidepressants.org [Internet]. Introductions and updates; 2022. Available from: https://www. survivingantidepressants.org/forum/3-introductionsand-updates/. Accessed July 9, 2022.
- 7. OPERA: the Netherlands study of Optimal, PERsonalized Antidepressant use [Internet]. Psychiatry Amsterdam; 2022. Available from: https:// psychiatryamsterdam.nl/project/opera/. Accessed July 7, 2022.
- 8. Sørensen A, Juhl Jørgensen K, Munkholm K. Clinical practice guideline recommendations on tapering and discontinuing antidepressants for depression: a systematic review. Ther Adv Psychopharmacol 2022;12: 20451253211067656.
- 9. Horowitz MA, Taylor D. Tapering of SSRI treatment to mitigate withdrawal symptoms. Lancet Psychiatry 2019;6:538-46.
- 10. Ruhe HG, Horikx A, van Avendonk MJ, Groeneweg BF, Woutersen-Koch H, Discontinuation of Antidepressants Taskforce. Tapering of SSRI treatment to mitigate withdrawal symptoms. Lancet Psychiatry 2019;6:561-2.
- 11. Quick Facts Oregon [Internet]. Washington, DC: US Census Bureau; 2022. Available from: https://www. census.gov/quickfacts/fact/table/OR/RHI125218. Accessed July 9, 2022.

- 12. Lewis G, Marston L, Duffy L, et al. Maintenance or discontinuation of antidepressants in primary care. N Engl J Med 2021;385:1257–67.
- Davies J, Read J. Authors' response to a critique by Jauhar and Hayes of "A systematic review into the incidence, severity and duration of antidepressant withdrawal effects: are guidelines evidence-based?" Addict Behav 2019;97:127–30.
- 14. Fava GA, Belaise C. Discontinuing antidepressant drugs: lesson from a failed trial and extensive clinical experience. Psychother Psychosom 2018;87:257–67.
- 15. Hengartner MP. How effective are antidepressants for depression over the long term? A critical review of relapse prevention trials and the issue of withdrawal confounding. Ther Adv Psychopharmacol 2020;10:2045125320921694.
- Maund E, Stuart B, Moore M, et al Managing antidepressant discontinuation: a systematic review. Ann Fam Med 2019;17:52–60.
- 17. Framer A. What I have learnt from helping thousands of people taper off antidepressants and other psychotropic medications. Ther Adv Psychopharmacol 2021;11:2045125321991274.

Appendix. Antidepressant Taper Guide

(YOUR OFFICE LOGO AND CONTACT INFO' HERE)

Stopping Your Antidepressant

Gradually lowering the dose can prevent withdrawal symptoms, which can be physical, like nausea or "brain zaps"; or mental, like irritability, anxiety, insomnia. Some people can stop with no tapering at all. But for most people, the process is much smoother if you follow the plan below.

Step 1

Lower the dose by the smallest amount you can manage. You want this step to go well. If the first step is rough, you might want to give up and just stay on your antidepressant. That could make it harder to stop later. It's worth the hassle to make the first step so small you don't think you'll notice it!

Your provider will give you a prescription for the lowest dose of your antidepressant. Use this new pill or capsule to make a small step down. Here are some simple examples, with no pill cutting:

Antidepressant	Smallest size	Your dose now	First step down	% ,	How to make that step
sertraline	25 mg	100 mg	75 mg	25%	Three 25 mg pills
escitalopram	5 mg	20 mg	15 mg	25%	Three 5 mg pills

However, if you can manage, cutting pills will make that first step even smoother. For example:

Antidepressant	Smallest size	Half pill	Your dose now	First step down	% ↓	How to make that step
sertraline	25 mg	12.5 mg	100 mg	87.5 mg	12%	Half a 100 mg, plus one 25 mg, plus half a 25 mg
escitalopram	5 mg	2.5 mg	20 mg	17.5 mg	12%	Half a 20 mg, plus one 5 mg, plus half a 5 mg

Step 2

After at least two weeks on Step 1 (more if it was rough at first) go down another small step. If you're confident this will go well, you can try a bigger step. If that goes badly, you can increase back to Step 1, wait until you're better, then take a smaller step next time.

If you are still having withdrawal symptoms, don't take another step until those symptoms are gone – and make your next step *smaller*. Ask your provider for a liquid version of your antidepressant if needed to make very small steps.

Steps 3 to Near Zero

Keep decreasing every 2 weeks, or more slowly if needed to make sure any withdrawal symptoms are gone before you take another step. In general, to limit withdrawal, slow down or take smaller steps down.

Near Zero

If it's been easy so far, you might notice some withdrawal with your last step. If you're worried,

If it's been rough, make the last step small. Maybe quarter your pills. Put the small quarters in one jar and the big quarters in another, and start with the big ones. Or get a liquid version from your provider.

Fluoxetine/Prozac

Because fluoxetine lasts a long time in your body, each step down is automatically smoother. Many people can take big steps, like from 20 mg to 10 mg capsules for two weeks, then skip every other day for two weeks, then stop. But if you have trouble with the first step, or are worried about how this will go, get a liquid version and take smaller steps as above.

Venlafaxine/Effexor

The smallest capsule is 37.5 mg. Reduce your dose by that size step, even if you're taking a big dose now. If each step down is really rough, the end will be rougher. Talk with your provider about switching to fluoxetine for the smoothest ride down.