



Therapeutic Advances in Psychopharmacology

Review

# What I have learnt from helping thousands of people taper off antidepressants and other psychotropic medications

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**Abstract:** Although psychiatric drug withdrawal syndromes have been recognized since the 1950s – recent studies confirm antidepressant withdrawal syndrome incidence upwards of 40% – medical information about how to safely go off the drugs has been lacking. To fill this gap, over the last 25 years, patients have developed a robust Internet-based subculture of peer support for tapering off psychiatric drugs and recovering from withdrawal syndrome. This account from the founder of such an online community covers lessons learned from thousands of patients regarding common experiences with medical providers, identification of adverse drug reactions, risk factors for withdrawal, tapering techniques, withdrawal symptoms, protracted withdrawal syndrome, and strategies to cope with symptoms, in the context of the existing scientific literature.

**Keywords:** antidepressant, deprescribing, discontinuation syndrome, iatrogenic, kindling, post-acute withdrawal, polypharmacy, psychotropic, tapering, withdrawal syndrome

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### Introduction

Although psychiatric drug withdrawal syndromes have been recognized since the 1950s - recent studies confirm antidepressant withdrawal syndrome incidence upwards of 40% – medical information about how to safely go off the drugs has been lacking. 1-4 To fill this gap, over the last 25 years, patients have developed a robust Internet-based subculture of volunteer peer support for tapering off psychiatric drugs and recovering from withdrawal syndrome.5-12 Since 2011, under the pseudonym Altostrata, I have operated one of those online communities, SurvivingAntidepressants.org. It is frequently mentioned in articles, books, papers, and websites about psychiatric drug withdrawal, 13-17 even in continuing medical information about psychiatric deprescribing.18

I endured 11 years of protracted antidepressant withdrawal syndrome myself. To understand my own condition, since 2004 I have read everything I could find about psychiatric drug adverse effects, tapering, and withdrawal syndromes.

Online, I have communicated with or been a peer counselor to more than 10,000 individuals seeking support for psychiatric drug withdrawal. It is as a patient advocate and lay expert in psychiatric drug withdrawal syndromes that I offer impressions of major themes from my experience. 19–23

### My interest in psychiatric drug withdrawal

I started SurvivingAntidepressants.org because of my own awful experience of antidepressant withdrawal. At age 50, in excellent physical health, I was prescribed 10 mg paroxetine for work stress, following which I developed sexual dysfunction, emotional anesthesia, and, after a couple of years, demotivation.<sup>24,25</sup> After a disastrous psychiatrist-directed switch to escitalopram, I sought tapering advice at the nearby outpatient psychiatric clinic of an internationally recognized university medical center. Receiving none, I went off paroxetine over a few weeks in 2004. A few years prior, I had stepped off 2 years' treatment with 10 mg fluoxetine, another common selective serotonin

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reuptake inhibitor (SSRI), for pre-menstrual symptoms with no difficulty.

Off paroxetine, I initially experienced hypomania, sweating, and electrical-feeling "brain zaps",26 the last continuing for 7 months. After several weeks, my acute withdrawal symptom pattern changed to other odd symptoms, among them disorientation, depersonalization, insomnia, light and heat intolerance, indigestion, palpitations, and unease,27 punctuated by spontaneous weeping spells, attacks of sheer terror, or sudden plunges into unprecedented contentless black holes of pure dread. 16,28 I felt a vacuum of positive emotion as well as genital anesthesia (post-SSRI sexual dysfunction or PSSD), which took several years to resolve.29,30 I had never felt anything like this before. It did not feel like "relapse". I spent hours hunting for journal articles about antidepressant withdrawal syndrome. My request to my psychiatrists for reinstatement of paroxetine, as the literature said was appropriate, 26,31 was refused.

My symptoms persisting over years, I must have contacted dozens of psychiatrists who had written about antidepressant withdrawal. Every one immediately told me I was experiencing "relapse" – except Richard Shelton at Vanderbilt University,<sup>26</sup> who responded, "I actually think the discontinuation syndrome is pretty bad in some situations and truly horrible in others.... almost all resolve; that is, except for a very small group, where the symptoms become persistent". (R Shelton, personal communication, 2006)

As psychotropic post-acute withdrawal symptoms do, mine fluctuated and mutated, 28,32,33 including 1.5 years of crippling muscle pain and spasms. I could not tolerate drugs, I was hyperreactive to anything that was neuroactive, even vitamin supplements.34 I joined paxilprogress. org, an online community, to find support.9 In my fourth year of protracted withdrawal syndrome (PWS), I was fortunate to be treated by a psychiatrist with tiny doses of lamotrigine, up to 1.5 mg, to stabilize my nervous system.<sup>27</sup> Still, my recovery was extremely gradual; ultimately, I experienced 11 years of PWS, 32,35,36 the latter half housebound and unable to work, which destroyed my career in information system design as well as my relationships. When I recovered, I was a white-haired retiree.

Counseling cases like mine every day, I do not want more people to suffer as I suffered.

### About SurvivingAntidepressants.org

The name SurvivingAntidepressants.org came about because I had read that, of all those taking psychiatric drugs (one in six United States (US) adults),<sup>37</sup> 95% were taking antidepressants.<sup>38</sup> However, drug combinations being so common among site members, we offer support for tapering all psychiatric drugs, including benzodiazepines.

The staff is all volunteers, usually experienced community members who have demonstrated interest and ability. We are careful to make it clear we provide only peer support and do not diagnose, prescribe, or provide medical advice or psychotherapy. We encourage members to "pay it forward" and support other members. We do not proselytize for going off psychiatric drugs; we offer tapering information only to those who request it. Our suggestions, which are intended to be discussed with prescribers, are based on publicly available information, such as drug package inserts, governmental agency data, and journal articles. 31,39

Based in the US, the site's English-language content draws more than 500,000 page views and 33,000 visitors monthly: 45% from the US; 12% from the United Kingdom (UK); Sweden, 9%; Canada, 6%; Australia, 5%; Germany, 4%; United Arab Emirates, 4%. The site has about 14,000 registrations, each under a unique pseudonym: 8000 female; 4600 male; 250 decline to state. We do not collect other demographic data. Based on what individuals say about themselves in discussions, they are adults; those aged 60 and above are well represented.

### Members are the Internet-using general public

Everyone requests assistance tapering off psychiatric drugs: retired people with grandchildren, parents, store clerks, busy entrepreneurs, computer programmers, college students, academics, and nurses, even psychiatrists and psychotherapists. 40–42 One of our longest-term members is a Maine lobster fisherman who experienced a prescription cascade dating from insomnia after his father's death in 2011 and struggled for years to taper escitalopram. Another is a firefighter coping with protracted SSRI withdrawal syndrome for more than a year.

Most of the site members are taking antidepressants, often with other psychiatric drugs. About 1500 mention starting psychiatric drugs in college, 300 in high school or younger, perhaps 200 when they were small children. More than 1000 indicate they started on psychiatric drugs for postpartum issues; for most, their children are long grown. About 6000 pseudonymous members have self-reported longitudinal case histories, including drug and tapering history, symptom patterns, and reflections on emotional state, some extending over years. Many sought help beyond primary care and emergency rooms, seeing multiple psychiatrists, elite clinics, and specialists such as neurologists and endocrinologists. Given the self-selection factors, these narratives likely tend towards more severe cases.

Although their lives may be complicated by drug withdrawal difficulties, the vast majority are average people who received average treatment from primary care providers, psychiatrists, and other specialists. So widely dispersed geographically, yet so remarkably consistent in theme, the experiences of these individuals are a powerful indicator of the gaps in clinical practice regarding the prescription of psychiatric drugs.

### Why do people look for tapering help online?

Just as I did 15 years ago, people who have conditions that are not well understood by medicine search the Internet for answers. 17,43,44 We would very much prefer to refer people to knowledgeable medical providers, but website members have been unable to find them. Many experienced painfully unsuccessful tapers following a physician's recommendations, restarted the drug, and, having lost confidence in their prescribers, want finally to stop it. Others mistrust prescriber uncertainty about tapering. All fear withdrawal symptoms. 17,45-51

Prescriber failure to monitor, recognize, and timely address withdrawal symptoms is the motivation for almost all the site membership. In their attempts to go off the drugs, almost all have been told they have relapsed, 2,52 even the many who suffered brain zaps – a hallmark of withdrawal syndrome – and especially those who have had mysterious symptoms for years, consistent with psychotropic PWS. 35,36,53–55 They turn to the Internet because they question this diagnosis.

#### The significance of withdrawal symptoms

Withdrawal symptoms are not inconsequential they indicate the nervous system is becoming destabilized,24,56,57 accounting for the variety and variability of symptoms.<sup>27</sup> According to established pharmacological principles, chronic application of any psychotropic brings about neurophysiological processes: adaption, tolerance, and potential dependence with withdrawal upon reduction of the drug.<sup>58</sup> A homeostasis premised on presence of the drug, physiological "dependence" is not synonymous with "addiction", which may co-occur with some psychotropics.<sup>59–61</sup> Considered evidence of physiological dependence, withdrawal symptoms are the unwinding of drug-induced neurophysiological adaptation.<sup>36,57,62,63</sup> Symptomatic experience of adaptation, dependence, tolerance, or withdrawal is individual.64

## Acute vs post-acute or protracted withdrawal syndrome

Across psychotropics, physiological dependence is developed in 1–8 weeks; following discontinuation, immediate or acute withdrawal similarly lasts 1–8 weeks.<sup>36</sup> Physiological dependence on SSRIs has been found to occur in about 4 weeks,<sup>65,66</sup> risk of antidepressant withdrawal syndrome increasing after the same period.<sup>59,64</sup> Antidepressant withdrawal symptoms have long been held to last a few weeks,<sup>3,64</sup> which may represent only acute withdrawal while the drug's target receptor at least partially re-adapts.<sup>54</sup>

However, across psychotropics, subsequent post-acute withdrawal symptoms (PAWS, also known as protracted withdrawal syndrome or PWS,), differing qualitatively from acute withdrawal, may last much longer, even years, 35,36,55,67-70 indicating that further neurobiological re-adaptation occurs at individual rates, sometimes very slowly. 24,57,62,71-73 PWS can be as debilitating and disabling as acute withdrawal symptoms. 27,28,32,35,55 Our longitudinal case histories reveal that the arc of recovery from PWS is frustratingly halting and very gradual, with many setbacks, on a scale of 6 months to years, 35 much as described in addiction medicine. 33,74-77

# Withdrawal symptoms may follow any drug dosage reduction

After physiological dependence is established, withdrawal symptoms may occur following any reduction in dosage, during a taper, or after a drug switch, as well as discontinuation of the drug.<sup>78</sup>

The rate of drug tapering seems to influence the development of withdrawal symptoms throughout the taper and afterward, slower tapers probably allowing some neurological re-adaptation during the tapering process.<sup>72,73</sup> We have found even mild withdrawal symptoms, which may indicate a lag in re-adaptation, may be compounded by subsequent reductions and become more difficult to reverse.<sup>55</sup>

### Distinguishing withdrawal from relapse

From the experiences of these thousands of patients, it appears that clinicians often mistake withdrawal symptoms for relapse. Antidepressant withdrawal symptoms, catalogued for decades, 1,27,79 can be profuse, intermittent, and mutable, manifesting in both physical and mental spheres. That emotional symptoms might also be withdrawal symptoms confuses Further, symptoms may not occur for weeks. The ambiguity may reinforce the tendency to not inquire about co-occurring physiological withdrawal symptoms (as well as reinforcing the belief that these syndromes are rare),47,80,81 but timing tells the tale<sup>3,56,82</sup>: any dosage decrease may trigger any type of withdrawal symptom, even if reported weeks later. 4,16,83

In light of their tendency to emerge after dosage reductions,82 it is not difficult to distinguish withdrawal symptoms from relapse. Generally, a readily recognizable constellation of unusual neurophysiological symptoms appears, such as electrical sensations (zaps) or sudden onset of dizziness, pain, nausea, or insomnia. If these are present with no other accountable medical factors, the condition is likely withdrawal syndrome, even if emotional symptoms are also present.<sup>27,35,78</sup> Patients often will describe physiological or emotional symptoms as new or exceptionally severe: "I've never felt this before",<sup>27</sup> but withdrawal symptoms tend to surge irregularly as "waves and windows", 28,84-86 while relapse of the original condition will be more consistent in pattern and takes longer to gradually develop.<sup>3</sup>

To verify withdrawal symptoms, we often have to draw people out, asking for fuller accounts of symptoms without psychiatric jargon.80,87 Thus, we have found the most important element of a tapering method – or any drug change – is close monitoring of the consequences of that change.<sup>3,87</sup> Prescribers should request immediate report of any odd symptoms, keeping in mind the mnemonics FINISH ["flu-like symptoms, insomnia, nausea, imbalance, sensory disturbances, and hyperarousal (anxiety/agitation)"3,82] or similar do not capture the universe of withdrawal symptoms or PWS.16,27,32,35 Carefully monitored gradual tapering not only minimizes withdrawal symptoms while tapering and acute withdrawal upon drug cessation,<sup>72,73</sup> it reduces the risk of an even more serious consequence - PWS, persistent nervous system destabilization when off the drug.32,36,54

### Harm reduction tapering

For decades, in both psychiatry and addiction medicine, there have been calls for research into tapering protocols for psychotropics so as to avoid withdrawal symptoms, 88-92 with little result. We have found that very gradual dosage reduction at an individualized pace minimizes the emergence of withdrawal symptoms. 56,73,93 Years ago, inundated by people with severe withdrawal symptoms from the "half, and half, and then off" reductions recommended by their prescribers, patient peer support groups propounded reductions of 10% per step,94 as suggested by many sources. 57,68,93,95-98 Since 2011, SurvivingAntidepressants.org has advocated a conservative 10% reduction per month of the most recent dose – an exponential taper, the size of each reduction becoming progressively smaller, approximating the hyperbolic method endorsed by recent research. 40,72,73,98 These gradual tapers to minimize withdrawal symptoms typically require the creation of customized dosages (Box 1) and take many months to several years, depending on individual tolerance for dosage reduction.

**Box 1.** Creating intermediary dosages for gradual tapering.

The range of packaged drug dosages being inadequate for appropriately individualized titration, <sup>99,100</sup> we advise using prescription liquids when available. Custom compounded liquids, tablets, or capsules, if affordable, can provide intermediary dosages, <sup>3</sup> as can the prescription tapering strips developed in the Netherlands. <sup>101</sup>

Otherwise, people have successfully tapered by

- Opening encapsulated drugs and counting out the enclosed beads.<sup>102</sup>
- Splitting tablets.<sup>103</sup>
- Making homemade suspensions with immediate-release tablets and water or pharmacy base liquid. 104,105
- If they cannot obtain or tolerate a liquid, people order digital milligram jewelry scales and weigh tablet fragments or powder to standardize their doses.

Why reductions at monthly intervals? Although diagnostic criteria require withdrawal to appear within a week of dosage reduction, our members report it can take several weeks (or more) for them to appear. 4,16,83 People may not recognize incipient symptoms themselves or it may take some time for symptoms to culminate. Pharmacokinetically, enough residual drug may be active to forestall withdrawal symptoms through the washout period. 57,72,73,106,107 If the taper proceeds without significant problems, for most drugs, people generally reduce to less than 2.5% of the original dosage before stopping completely.<sup>72,73</sup> Given the potential lag time in emergence of withdrawal symptoms, the person should be monitored for at least 3 months after discontinuation, with low-dose reinstatement at the ready should subsequent withdrawal symptoms appear.

Among the members of the site, those who had prior difficulty going off drugs express high satisfaction with support for a much more gradual tapering method. They feel in control and more confident about their futures off the drugs.<sup>28,48</sup> Occasionally I get messages from people expressing gratitude, even for saving their lives.

### Adjusting the taper to the individual

Tolerance for dosage reductions appears to be individual. When withdrawal symptoms arise during a taper, the rate of reduction may need to be adjusted accordingly. As any emergence of withdrawal symptoms indicates the interval between reductions is too short or decrements too large, 56,73 careful monitoring is essential to tailor the taper to the individual.3,108 For example, those exceptionally sensitive to dosage reduction might be more comfortable with a "microtaper" reduction schedule even more attenuated than 5-10% a month.<sup>72,73,109</sup> While a dosage reduction might be bumpy but tolerable for a few days, patients should not have to suffer significant withdrawal symptoms for weeks while waiting for an appointment.87 We have found if withdrawal symptoms show no improvement or get worse after a week, a slight increase in dosage - widely recommended by many authorities for many years - made right away probably will resolve them,<sup>3,31</sup> potentially preserving the patient's nervous system as well as the prescriber patient relationship. When the person has clearly stabilized, a more gradual taper may resume.<sup>3,31</sup>

### Special considerations for some drugs

We apply the same basic exponential tapering protocol to all diagnoses and all psychiatric drugs.

Those who experienced symptoms identified as psychotic prior to drug treatment are cautioned to be extremely careful in dosage reduction,<sup>72</sup> lest they trigger such symptoms as withdrawal symptoms, and consider ceasing at the minimal dosage they find effective to control pre-existing symptoms.<sup>110,111</sup> However, even those with no such prior history may experience symptoms of psychosis as withdrawal symptoms from any type of psychiatric drug.<sup>82,112</sup>

As noted many times in the literature, patients find tapering paroxetine to be extraordinarily difficult. 4,56,113 Many are stymied at a dose lowered to 5 mg or less. A powerful inhibitor of its own metabolism, paroxetine dosage decrease accelerates its processing, which amplifies the decrement to evoke severe withdrawal symptoms. 24,56,73,106 In these intolerable withdrawal situations, people are faced with the risk of a switch to another SSRI (most likely fluoxetine),56,114 which they are reluctant to do, not having confidence in prescriber expertise. 46,48,51,115,116 Unfortunately, those who attempted substitution of drugs with longer half-lives in order to experience a smoother taper have not always found this to be easy or successful. 117

# Complexities of adverse drug reactions and polypharmacy

Identification of current adverse drug effects is necessary to avoid mistaking them for withdrawal symptoms once the taper commences. Many who come to the site for help with tapering or withdrawal syndrome seem to also be tolerating adverse drug reactions (ADRs), such as insomnia, sexual dysfunction, activation, and allergic reactions. <sup>52,118</sup> Although they were miserable on the drugs, these people were advised that they needed to continue taking them for therapeutic benefit. And so they did, for years. <sup>52,119,120</sup>

So many recount prescription cascades based on rounds of withdrawal symptoms, drug adverse reactions, drug-drug interactions, and so forth, <sup>121,122</sup> that some years ago, in order to set priorities for a rational tapering plan, <sup>123</sup> I had to devise a method to untangle polypharmacy, itself a risk factor for adverse drug events. <sup>124,125</sup> Daily drug and symptom monitoring is the key to this method (see Box 2 and Table 1). Existing instruments for "measurement-based care" such as questionnaires, <sup>126,127</sup> DESS (Discontinuation-Emergent Signs and Symptoms), <sup>128</sup> FIBSER (Frequency, Intensity, and Burden of Side Effects Rating scale), <sup>129</sup> or CAST (Concise Associated

### Box 2. Applying the daily drug schedule and symptom diary.

This technique corresponds to chart reviews in deprescribing, <sup>131</sup> and can facilitate the close monitoring necessary for differential diagnosis, safe tapering, and other drug changes. <sup>132–134</sup>

We request contemporaneous hour-by-hour daily notes of symptom pattern relative to drug schedule, reported 24 h at a time, captured over several days. This will profile the baseline symptom pattern, revealing ADRs, including paradoxical effects, interdose (also known as rebound or breakthrough) withdrawal, 135–137 drug interactions, or withdrawal symptoms from dosage reduction.

If drugs are taken on a consistent schedule, ADRs often can be observed in a regular cycle time-bound to drug dosing or change, corresponding roughly to peak plasma, half-life, activity of metabolites, or washout of a drug. 106,138,139 Unlike ADRs or relapse, withdrawal symptoms generally occur in sharp, sporadic waves unrelated to the drug schedule. 13,28,32,140

To prevent paradoxical reactions, which peak after drug ingestion, or interdose withdrawal, particularly with short-acting benzodiazepines, arranging the dosing schedule or dividing doses to maintain drug plasma level more evenly over 24 h may establish a more stable symptom pattern. It is essential to do this before initiating a taper, to avoid mistaking drug adverse effects for withdrawal symptoms.

A year's drug history and a drug interactions report assist in interpretation of the symptom pattern. 141-143 (see Table 1).

Symptom Tracking),<sup>130</sup> cannot distinguish withdrawal symptoms from ADRs or anything else, as a symptom's daily chronology is crucial (Table 1). Once the baseline symptom pattern is understood, it is possible to prioritize reduction of the most troublesome drug in the taper plan (Box 3).

# The pitfalls of hyper-reactivity and kindling reactions

As withdrawal symptoms indicate neurological instability, we have found ameliorative dosage increase, reinstatement, or other drug treatment should be approached very cautiously. Many site members seem to react badly to what are considered minimal doses of any psychoactive substances, usually responding with activation or paradoxical reactions.<sup>57,135,154,155</sup> Some arrive already wracked by failed withdrawal attempts or adverse reactions to aggressive drug treatment because their prescribers thought they were suffering a dramatic "relapse", "non-response", or other psychiatric disorder rather than withdrawal syndrome. 154,156 The hyper-reactivity also can be triggered by small amounts of alcohol and neurologically active antibiotics, herbs, even foods and supplements such as caffeine, B vitamins, St. John's Wort, and fish oil,34,157,158 as well as sound, light, and other stimuli (sensory sensitivities recognized as among withdrawal symptoms).<sup>27</sup>

This hyper-reactivity closely resembles the neurological sensitization observed in alcohol, amphetamine, benzodiazepine, cocaine, and antipsychotic use – a consequence of repeated episodes of psychotropic withdrawal and reintroduction that predisposes to kindling reactions. 159–163 Also seen in the development of multiple chemical sensitivity from toxin exposure (which may include cross-sensitization) and amply demonstrated in animal models, 34,164,165 neurological kindling is not to be confused with the kindling theory of psychiatric disorders. 166 Once sensitization is established, neurological kindling leads to escalating adverse reactions to dosage changes or introduction of other psychotropics; this tendency may be longlasting, if not permanent. 163 Any history of longterm chronic psychiatric psychotropics might include many incidents of occasional forgotten doses, hasty drug switches, ADRs, going on and off drugs, and prior withdrawal symptoms - mishaps arising from normal clinical practice<sup>54,98,114,158,167</sup> - that may induce sensitization and propensity to neurological kindling.<sup>24</sup> This may be the iatrogenic neuropsychiatric precondition various authors have linked to "pseudo-resistance", "acquired resistance", "treatmentresistance", and "tardive dysphoria". 24,75,168-174

This hyper-reactivity is so common, we assume all members who have prior episodes of inconsistent dosing, adverse drug effects, or withdrawal symptoms are prone to it. To evade kindling when dosage increase or reinstatement is called for, we have found an initial probe amounting to a very small fraction of the original dosage, such as 1 mg citalopram for withdrawal from 20 mg, often ameliorates withdrawal symptoms, including recent abrupt ("cold turkey") withdrawal, indicating partial receptor occupancy suffices. 57,73,107,175 Depending on the severity of hyper-reactivity, we have found reinstatement of a very low dose of the drug (or fluoxetine) can be surprisingly effective even in long-standing cases of PWS. 35

(However, in a generally unrecognized syndrome, a few score site members who took an antidepressant for a very short time with a severe adverse

**Table 1.** Identifying ADRs, withdrawal symptoms, and relapse.

Appearance of symptom in daily drug and symptom diary over at least several days	Potential interpretation	Aids to refine identification or resolution
Regularly, every day (single drug)	Adverse drug reaction	<ul> <li>Often more intense after drug is ingested<sup>138</sup></li> <li>Review pharmacokinetics of individual drugs (note active metabolites)<sup>139,144</sup></li> <li>Daily lifestyle habit (e.g., caffeine, vitamins)</li> <li>Taper offending drug to avoid withdrawal symptoms</li> </ul>
Regularly, every day (polypharmacy)	Drug-drug interaction	<ul> <li>Drug interaction report<sup>133</sup></li> <li>Review pharmacokinetics of individual drugs (e.g., peak plasma, active metabolites)</li> <li>Gradually separate dosing schedule of drugs taken simultaneously, monitor to see if timing of symptom moves with timing of drug dosing<sup>145</sup></li> <li>Taper offending drug to avoid withdrawal symptoms</li> </ul>
Regularly, every day (all psychotropics)	Paradoxical reaction	<ul> <li>Indicates dosage is too high<sup>135,146</sup></li> <li>Usually activation shortly after drug ingestion<sup>138</sup></li> <li>Often sleeplessness, anxiety, panic, akathisia<sup>136</sup></li> <li>Gradually reduce dosage of offending drug to avoid withdrawal symptoms<sup>147</sup></li> </ul>
Regularly, every day (hypnotics or short-acting drugs)	Rebound, breakthrough, or interdose withdrawal	<ul> <li>Occurs when drug action is wearing off<sup>136</sup></li> <li>Withdrawal symptoms from hypnotics are often sleeplessness, anxiety, panic</li> <li>Distribute dosing schedule to resolve symptoms (or convert to long half-life drug)<sup>109,140,148</sup></li> <li>Indicates physiological dependency requiring gradual taper<sup>115,136</sup></li> <li>Gradually taper sleep drugs to avoid withdrawal symptoms (e.g. rebound insomnia)<sup>136</sup></li> </ul>
Sporadic, usually in waves, unrelated to drug cycle	Withdrawal symptom	<ul> <li>Check for irregular dosing<sup>149</sup></li> <li>May occur after drug switch<sup>78</sup></li> <li>If recent reduction in dosage, slight updose may resolve<sup>72,73</sup></li> <li>Check for menstrual cycle, when withdrawal symptoms may worsen<sup>150</sup></li> </ul>
Sporadic or constant, but persists for more than 6 weeks after discontinuation <sup>27,32</sup>	PAWS or PWS	<ul> <li>Low-dose reinstatement may resolve (see above)</li> <li>Caution: potential withdrawal-induced hyper-reactivity to additional psychotropics (kindling)</li> </ul>
Constant, but new symptom, started during drug treatment	Adverse drug effect or withdrawal symptom <sup>27</sup>	<ul> <li>More intense shortly after taking the drug, less after passage of half-life – dosage may be too high (gradually reduce dosage to avoid withdrawal symptoms)<sup>147</sup></li> <li>Adverse drug effect can be akathisia, emotional anesthesia<sup>151</sup></li> <li>Check for irregular dosing, can cause withdrawal symptoms<sup>149</sup></li> <li>If recent reduction in dosage, slight updose may resolve<sup>72,73</sup></li> <li>Check for menstrual cycle<sup>150</sup></li> </ul>
Constant, started before drug treatment	Ineffective drug treatment or relapse	<ul> <li>If drug taken more than a month, gradually reduce dosage to avoid withdrawal symptoms<sup>134</sup></li> <li>Rule out adverse reactions, withdrawal symptoms, and PWS<sup>27,32,78</sup></li> </ul>

### Box 3. Which drug to taper first?.

It is essential to change only one drug at a time to avoid confounding withdrawal symptoms or adverse effects. 152

- The drug displaying greatest toxicity via adverse effect usually is the tapering priority.
- Follow with the most activating drug, usually an antidepressant or stimulant. 130,151,153
- To shield sleep, so very often broken during psychotropic tapering, 36,74 anxiolytics and drugs taken for sleep are tapered last.
- If reduction of a drug causes adverse effects from another drug to emerge, tapering the first drug may be interrupted to
  reduce the second drug, e.g., reduction in escitalopram (which can be stimulating) has caused co-administered nightly
  mirtazapine to make the person too groggy in the morning, then mirtazapine may be reduced at least part way.

activation reaction,<sup>130,151</sup> often within a few doses, have reported post-discontinuation symptom patterns identical to PWS, with the same very gradual resolution of neurological dysregulation over years. We presume their nervous systems are highly sensitized and additional drug treatment to be risky.)

What is clear from our thousands of case reports: Never, ever, skip doses to taper. The drug blood level fluctuations from intermittent dosing are highly effective in engendering kindling reactions. 41,106 As clinicians have long been aware that a forgotten dose can bring on withdrawal symptoms, 1,149,176 it is unaccountable why skipping doses is at all recommended as a tapering strategy. 177–179

### Emotional spirals and neuro-emotions

People experiencing withdrawal may avow every possible variation of depression or anxiety. Like other ADRs, withdrawal might generate psychological symptoms, including suicidality, 157,180 that are unprecedented or more severe than ever before experienced. 16,28 Often bewildered by their symptoms, having no other vocabulary to describe their unusual psychological states, 181 patients might claim "not feeling myself", "I feel OCD", "I feel psychotic", "I'm having a breakdown". Or, as I said when told I had relapsed, "This doesn't feel like my depression". 16,47,49 Many go through a phase of shock: realization there is no medical safety net is a terrifying existential jolt, prone to combustion with worries about security and mortality, intense regret, self-blame, and outrage. They feel abandoned and helpless.

People might also react to their conditions in a habitual emotional way, such as expressing shame or fear of withdrawal-induced symptoms, meta-emotions that compound the unexpected, unpleasant withdrawal sensations and send them into emotional spirals. 182,183 This emotionality is

not a psychiatric disorder, but it confuses clinicians, who have a strong bias towards expecting relapse after discontinuation, causing a great deal of misdiagnosis.<sup>2</sup> Furthermore, emotional lability is characteristic of many drug withdrawal syndromes, acute and prolonged36,56; it may be coincidental that withdrawal-associated negative emotions sound like "rebound" of original symptoms.<sup>27,36,156</sup> Like physiological withdrawal symptoms, emotions generated by the neurological chaos of withdrawal often come in intense, sporadic waves, with exaggerated amplitude. 28,86 We call them "neuroemotions"; among them may be extreme anxiety, despair, or anger, as well as hypomania or mania. 184-187 Another very alarming but common post-discontinuation symptom is an emotional anesthesia (reported as "depression", "numbness", "anhedonia", "apathy", "dysthymia"). This can be an adverse effect of a drug that persists after discontinuation or a withdrawal-induced symptom. <sup>29,54,140,188,189</sup> Emotional anesthesia is not "relapse" or emergence of a new psychiatric disorder, we have seen that it abates with time, along with withdrawal-induced derealization or depersonalization, 27,29 which also cause a great deal of meta-distress. Finally, withdrawal-induced insomnia should not be discounted as a factor in emotional distress. 74,190,191

As peer counselors, we encourage members to learn self-care with non-drug techniques such as meditation to surf the waves of symptoms and "changing the channel" on fears and negative thoughts in order to allow nervous system stabilization. <sup>192,193</sup> Some seek external psychotherapy. It is gratifying to see people in physical and neurological misery teach themselves emotional survival skills in order to persist in tapering and recovery from withdrawal syndrome. They also are consoled to find others in an online community who understand what they are experiencing, as often they have found no understanding or validation from friends, family, or medical providers. <sup>46</sup>

#### What patients need from medicine

Patients should be able to rely on their doctors for tapering support rather than having to look for it on the Internet.<sup>194</sup> From the first, every psychiatric drug prescriber should limit adverse drug events and anticipate the need to deprescribe,<sup>195</sup> by

- Frequent, close monitoring of drug changes
- Minimizing withdrawal risk factors
- Individualizing tapers
- Recognizing and treating PWS

### Monitoring for and recognizing adverse drug events is the key

Though medicine is increasingly dependent on prescription of drugs long-term, physicians are historically very poor at attending to ADRs in general.52,87,196-198 Since the 1950s, the literature abounds with warnings about mistaking psychiatric drug withdrawal symptoms for relapse.82,26,78 Yet, even antidepressant efficacy studies run by leaders of psychiatry have failed to include differentiation protocols for withdrawal symptoms – a serious confound. 199,200 Every one of our 6000 case histories contains a trail of such misdiagnosis from multiple prescribers, including psychiatrists. Rather than relapse being the horse and withdrawal symptoms the zebra,201 a more constructive bias is to "maintain a high index of suspicion" that any unusual psychological or physical symptoms are due to drug changes.82

## Avoid common clinical practices that elevate withdrawal risk

Many theories have been brought forth about who might be vulnerable to withdrawal syndrome. Drug half-life is questionable as the central factor,66 considerations being skewed by comparisons of two SSRI outliers: paroxetine and fluoxetine. 24,56,73 Many members are having difficulty going off fluoxetine, citalopram, aripiprazole, diazepam, and clonazepam. It seems more likely that a typical history of irregular dosing, drug switches, overlooked ADRs, and prior withdrawal symptoms predisposes to neurological sensitization, kindling reactions, difficulty in dosage reduction, and possibly "treatment resistance". The nervous system may not be as elastic as presumed. It is the clinician's responsibility to minimize these risk factors.

# Individualize tapering to reduce the major risk of protracted withdrawal syndrome

"Expert opinion" that psychotropic withdrawal syndromes are immediate and short-lived has been mistaken; it is only the acute phase that lasts a few weeks. Beyond that, persistent symptoms are not "relapse" or "another intercurrent illness", as clinicians have been instructed.<sup>64</sup> The entire field, including addiction medicine, has overlooked the significance of debilitating psychotropic PAWS or PWS, and, consequently, the importance of individualized tapering to minimize withdrawal symptoms. For decades, across psychotropics, addictive and non-addictive, there have been calls for more research and training in proper tapering techniques to avoid withdrawal symptoms, PWS, and assure safe exit from drug use. That research and training needs to be instituted now, along with update of practice guidelines worldwide. 202,203

## Recognize and treat post-acute or protracted withdrawal syndrome

As 30 years of widespread long-term prescription of psychotropics expose more and more people to withdrawal risk, increasing numbers have developed PWS, with recognition of psychiatric druginduced PWS only recently emerging. 35,36,55,68-70 It has been proposed that inclusion of a diagnosis for antidepressant PWS in the Diagnostic and Statistical Manual of Mental Disorders (and the International Classification of Diseases) hinges on evidence of successful "rechallenge" with the original drug, demonstrating that PWS descends from acute withdrawal syndrome rather than emerging as an independent phenomenon.<sup>204</sup> We have shown some cases of PWS do resolve with reinstatement of the original drug.35 With potentially millions suffering from misdiagnosed PWS right now, a DSM-5 diagnosis for PWS, such as was finally awarded to Antidepressant Discontinuation Syndrome 995.29 (T43.205A) in 2013,59 and treatment for this iatrogenic condition cry out to be established.

What I have learnt is any patient is at risk for psychotropic withdrawal symptoms and the severity of injury from unrecognized adverse drug effects and withdrawal symptoms can be major. Patients need prescribers to revise their assumptions and practices for the sake of our nervous systems.

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#### Supplementary materials

The referenced information and pseudonymous case reports are all publicly accessible on SurvivingAntidepressants.org

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