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CME TEST ARTICLE

Deprescribing and Its Application to Child Psychiatry

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Deprescribing is the structured approach to drug discontinuation with the goal of "parsimonious use" (Gupta & Cahill, 2016), or use that is designed to provide the minimum effective dose and number of medications. It is not synonymous with medication cessation, although that can be a result of deprescribing. The term was first developed in the fields of geriatric medicine and end-of-life care and then extended to primary care and more recently to psychiatry. The deprescribing process is the systematic approach to identifying and discontinuing medications when existing or potential harms outweigh existing or potential benefits. This is accomplished with consideration of an individual's treatment goals, functioning, values, and preferences (Scott et al., 2015).

Previously published guidelines to assist primary care physicians in deprescribing provide the following algorithm: 1) ascertain a comprehensive medication history including all current medications and the reason for each one; 2) consider risk of overall medicine-induced harm; 3) assess each medication for discontinuation; 4) order the priority for discontinuation; and 5) implement and monitor patient during the taper (Anderson, Foster, Freeman, & Scott, 2016;

Educational Objectives
Upon completion of this activity, participants should be able to:
- Define deprescribing.
- Describe procedures used for deprescribing in youth.

Target Audience
This CME activity is intended for child and adult psychiatrists, pediatricians and other healthcare professionals with an interest in the psychopharmacology and treatment practices for child and adolescent psychiatric disorders.

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Scott et al., 2015). When selecting medications to discontinue, they suggest starting with medications: 1) without a clear or valid indication; 2) that are part of a prescribing cascade, meaning that upon more careful history gathering it is learned that side effects of drugs were misdiagnosed and treated as symptoms of another disorder; 3) where actual or potential harms outweigh benefits; 4) if ineffective or symptoms originally targeted have resolved; 5) that are preventive in nature; and 6) that are imposing an unacceptable treatment burden (Anderson et al., 2016; Scott et al., 2015).

Safety is maximized when medications are prescribed at the lowest effective dose with systematic reassessment of the need for continued use (Moore & Mattison, 2016). Deprescribing reduces adverse drug reactions (Sivagnanam, 2016), improves rates of medication adherence, (Reeve, Shakib, Hendrix, Roberts, & Wiese, 2014; Sivagnanam, 2016), and reduces financial costs (Reeve et al., 2014). Deprescribing has been better studied in the elderly population, where randomized trials and high quality observational studies show that drug discontinuation, including psychotropic medications, can be done without precipitating withdrawal syndromes and results in reductions in cognitive decline, fall risk, and mortality (Scott & Le Couteur, 2015). The psychotropic medication class most studied in regard to deprescribing is antipsychotics, though this has not been done specifically in youth (i.e., children and adolescents) (Declercq et al., 2013). Looking at adults with chronic psychotic disorders on multiple antipsychotic medications, switches to monotherapy resulted in loss of body mass, no worse symptom control, and no increase in hospitalization (Essock et al., 2011). In one study in an adult population utilizing clinical pharmacists, the treating psychiatrists reported that a structured medication review had a positive influence on their awareness of the prescribed medication(s), with no adverse events reported. No symptoms or functional outcomes were followed as part of this study (Scheifes, Egberts, Stolker, Nijman, & Heerdink, 2016).

Studies of the functional outcomes from systematic deprescribing with children have not been performed, although individual patient improvements can be observed as exemplified in the case below.

CASE STUDY

Alexa,* a 16-year-old female, was referred to the psychiatric residential treatment facility (PRTF) by the state director of Magellan Health Services. She came in from a rural town where she was receiving care from a psychiatric advanced practice registered nurse (APRN) under the direction of a psychiatrist. During her admission interview, she spent much of the time sleeping and noticeably drooled; she was concurrently on 10 psychotropic medications and 12 additional medical medications. Prior to admission to the PRTF, her lifetime psychotropic bill was around $275,000.

Alexa was removed from her chemically dependent biological mother at 8 months of age due to severe neglect and was placed in foster care. After some back and forth between her biological mother and her foster family, she was adopted. When Alexa was 10, her family changed residence, moving from an urban to a rural setting, and she began acting up. This included being aggressive toward her parents and combative with classmates at school, threatening to kill her adoptive mother, stealing, running away, self-harm behaviors (cutting her arms and clawing her face), running into traffic, and frequent police contact. By the time she was admitted to the PRTF, she had been on psychotropic medications for 5 years, and her adoptive parents reported that it was "difficult to tell what medications were helping."

Alexa received an intermittent explosive disorder and oppositional defiant disorder diagnosis by the PRTF's staff psychiatrist. She had been in the pro-

*Names and details have been changed to protect patient privacy.

gram for only 28 days, at which point her parents felt she was doing well and brought her home. Her attending psychiatrist observed that the increase in hyperactive behavior was probably a case of her gaining energy after getting off so many medications. He said that if she had remained in care a bit longer he would have gotten her off the quetiapine (50 mg). Six months after her departure, she is still being seen by one of the PRTF's psychiatrists, is doing well in school and at home, and is still on 50 mg of quetiapine. (See Figure 1.)

BARRIERS IN PSYCHIATRY

As outlined by Gupta & Cahill (2016), particular challenges with prescribing in the field of psychiatry relate to a lack of diagnostic and therapeutic precision, focus on symptomatic rather than functional outcomes, reliance on individuals' subjective experience of symptoms, and discontinuity in treatment relationships and systems of care. Lack of continuity makes it difficult to evaluate the necessity of a medication when providers have no information about why medications were started or what the responses to treatment were (Plakiotis, Bell, Jeon, Pond, & O'Connor, 2014). Few studies examine medication cessation, as psychopharmacology research is most frequently done with relatively brief 8–12 week trials on the clinical effects of early treatment with psychotropics. Further, lack of guidelines and data on discontinuation paradigms serve as a barrier to deprescribing (Gupta & Cahill, 2016).

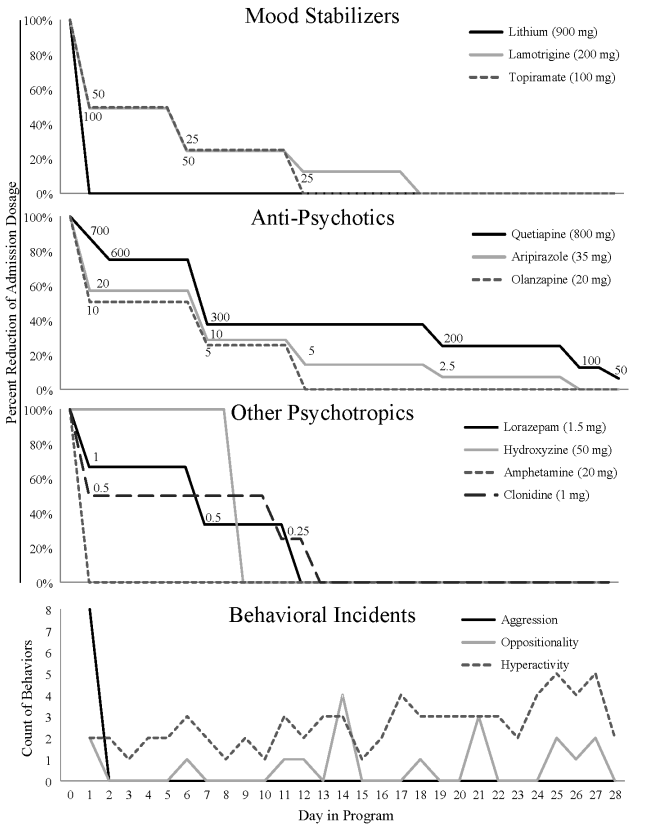

Figure 1. Psychotropic Medication Discontinuation and Disruptive Behavior for Case Example (with starting dosages and dosage reductions over time)

APPLICATION TO CHILD AND ADOLESCENT PSYCHIATRIC PRACTICE

Deprescribing is relevant in child and adolescent psychiatry given growing concerns about increasing rates of psychotropic medication use in youth, polypharmacy, and their associated risks. Even when indicated and when improvement has been documented, polypharmacy in youth is concerning because of the increased risk of side effects. Both the total number and severity of side effects increase as the number of medications increase, which is a consistently demonstrated risk for adults and youth—and for child and adolescent psychiatric medications in particular (Hilt et al., 2014; Kurian et al., 2016; Tveito et al., 2016). Youth have been repeatedly reported to experience a higher frequency of side effects from psychotropic medications than adults do overall (Comer, Olfson, & Mojtabai, 2010; Correll & Blader, 2015; Gallego, Nielsen, De Hert, Kane, & Correll, 2012). This is of additional concern for youth because the immature and developing organ systems of youth can make them more vulnerable to both immediate side effects and long-term side effects, such as cardiometabolic disturbances (Correll, 2008; Woolston, 1999) and tardive dyskinesia (Garcia-Amador et al., 2015). The question then becomes whether the benefit from increased effectiveness outweighs the burden of increased side effects. When one considers not only immediate side effects but the risk of developing future adverse effects that are not immediately evident (for example, diabetes secondary to use of second-generation antipsychotics), calculating the risk-benefit ratio becomes even more complicated.

The developmental nature of youth's mental health makes deprescribing particularly relevant to child and adolescent psychiatry. With development, some symptoms attenuate over time and/or environmental requirements change in a way that impairment is mitigated. Youth functioning changes longitudinally due to factors of normal development. Biologically, the physiologic effects of puberty may increase the likelihood of development of mood and some anxiety disorders, thus increasing caution about some medication discontinuations. Youths' psychological abilities may grow and change, with an expanding ability to use cognitive resources or utilize therapy or other treatment modalities to manage symptoms. Environmental factors are dynamic and important to consider, given that youth interact daily with multiple social and ecological systems including peers, family, and school. These environmental factors can also be influenced by mental health interventions, such as parent management training or consultation with school personnel.

DEPRESCRIBING RESEARCH SPECIFIC TO RESIDENTIAL TREATMENT SETTINGS

Studies of deprescribing in child psychiatry mostly come from samples of youth treated in residential settings. This may be the result of shorter inpatient stays and concerns about destabilizing the youth by undertaking deprescribing in an outpatient setting. Research has shown that high psychotropic medication rates and polypharmacy are common for many youth entering residential care programs (Connor, Ozbayrak, Kusiak, Caponi, & Melloni, 1997; Dean, McDermott, & Marshall, 2006). These rates are often the result of years of out-of-home care where youth tend to accrue medications, often following repeated hospitalizations (Dean et al., 2006; Fontanella, Pottick, Warner, & Campo, 2010; Pathak et al., 2004; Warner, Fontanella, & Pottick, 2007). The goal of pharmacotherapy is to reduce symptoms and enhance the effects of psychosocial treatment, but consistent effort is needed to ensure that prescribed psychotropic medications are relevant to a youth's current clinical needs. This section will review evidence that psychotropic polypharmacy can be reduced or eliminated within the context of clinically directed psychoeducational treatment milieus.

The first study by Connor and McLaughlin (2005) followed 141 youth in a non-profit intensive residential treatment center (RTC) in New England over a 9-year period. This RTC provided a highly structured milieu of group therapy programs and aftercare services for youth with serious emotional disturbance. At admission, 79.4% of the youth were on psychotropic medication, of which 57.2% were on 2 or more. Results showed that 66% of the children were discharged on less medication than they came in on at admission, and for youth on polypharmacy, the number of psychotropic medications was reduced from an average of 3.1 at admission to 1.8 at discharge. Notably, medication reduction was significantly related to lower psychopathology scores from admission to discharge. Of interest the authors state, "Our results suggest the possibility that, within the setting of a therapeutic and highly structured residential treatment environment with a long length of stay, psychiatric medications can be reduced for the child with severe and chronic emotional and behavioral problems."

Similar results were found by Handwerk and colleagues (2008), who examined 1,010 youth admitted to an RTC in the Midwest which uses the Teaching-Family Model (Thompson & Daly, 2015). Seventy-two percent of these youth presented with clinically significant externalizing behavioral problems and 45% had clinically significant internalizing behavioral problems. The psychotropic medication rate at the time of admission was 40% and was reduced to 26% at departure. Additionally, medication for youth on 2 or more medication classes was reduced from 17.3% to 9.2%. Discontinuation of medication occurred across all drug classes. At time of departure from the facility, youth who experienced psychotropic medication reductions were rated as more improved, meeting more treatment goals, and more likely to succeed post-placement.

Van Wattum and colleagues (2013) examined 131 adolescents in a New England RTC that uses a treatment team approach with childcare workers, clinical therapists, nursing staff, and a child psychiatrist. The program serves seriously emotionally disturbed youth who are referred from social services agencies, psychiatric hospitals, local boards of education, juvenile justice agencies, and parents. The program obtained an 18% decrease in the number of youth on psychotropics (101 to 83) over the course of treatment, and the average number of medications per youth decreased from 2.2 to 1.6. Sixty percent of all youth admitted on a psychotropic had a least one medication reduction. At departure, no difference was observed on functional scores between youth with a reduction in psychotropic medications versus youth who experienced no reduction in their psychotropic medications. However, youth experiencing medication reduction were more likely to be discharged to a less restrictive setting (arguably an indication of successful treatment). While not a treatment outcome, they report that psychotropic medication reductions resulted in monthly cost savings of $21,365 ($256,368 annually).

In an examination of youth in two independent intensive RTCs (one in New England, one in the Midwest), Bellonci and colleagues (2013) found that overall 55% of youth had one or more of their psychotropic medications discontinued during the treatment stay. Both programs utilize cognitive-behavioral management treatment programs, and serve youth with severe emotional and behavioral problems. It is important to note that the psychotropic medication management approach of the attending psychiatrists of both programs focused on youth being on only the medications necessary to meet their treatment needs and no more (the principle of sufficiency). The average number of psychotropic medications was reduced from 3.5 at admission to 1.4 at departure for youth who experienced a medication reduction. The number of physical assaults decreased from 2.3 during the first two weeks to 0.5 during the last two weeks, and the number of restraints decreased from 1.4 during the first two weeks to 0.3 during the last two weeks. The improved outcomes seen in these youth while undergoing significant psychotropic medication reductions are in fact prima facie evidence that the admission levels of psychotropic medication were no longer clinically indicated in the setting of the residential milieu.

Huefner and colleagues (2014) examined youth entering an intensive RTC at a large non-profit program in the Midwest. This RTC is a locked, 24-hour mid-term program which offers medically directed care for seriously troubled youth who require supervision, safety, and therapy. In addition to medically directed care, the program uses a psychosocial cognitive-behavioral treatment model. Most youth in this program (58.7%) were referred from inpatient or juvenile justice settings and entered with high psychotropic medication rates—79% on medication, with an average of 2.4 medications per child. Psychotropic medication rates were reduced at discharge to 67%, with an average of 1.3 medications. During treatment, there were also significant reductions in emotional and behavioral problems and the use of restraints with these youth. Results show that it is possible to safely and significantly reduce psychotropic medication rates

to more conservative levels within the context of a clinically directed cognitive-behavioral treatment milieu.

Lee, Walker, and Bishop (2016) examined juvenile justice administrative data in Washington State, for a medium-maximum security facility. The facility uses a CBT–DBT (cognitive-behavioral therapy–dialectical behavior therapy) treatment model, aggression replacement training, and employs psychiatrists and psychologists. They did not examine functional or symptom outcomes, but found that using a psychiatric practice guideline led to reductions in psychotropic medications without an increase in aggressive behavior. The program achieved a 26% decrease in psychotropic medication costs, while comparison facilities saw a 104%–152% increase in psychotropic medication costs over the same period of time. The authors identify potential benefits of reduced reliance on psychotropics, including fewer side effects, better health outcomes, and enhanced youth skills.

Some support for psychotropic discontinuation has also been found in inpatient settings. Fontanella and colleagues (2010) examined 522 Medicaid-covered adolescents admitted to three Mid-Atlantic private hospitals. Most of these youth had an internalizing DSM diagnosis (76.3%), and 11% had a behavioral disorder. Suicidality was high, with 67.7% having a recent suicide threat or attempt, and another 17.2% having a history of suicide attempts. Consistent with other research examining medication rates in inpatient settings (e.g., Jameel, Kamath, Bhat, & Bairy, 2012; Lekhwani, Nair, Nikhinson, & Ambrosini, 2004; Pathak et al., 2004), the percentage of youth on psychotropics increased from 63% to 91% from admission to discharge, and for those youth on psychotropic medication the polypharmacy increased from 43% to 62%. Notably, results showed that youth who came in on medication and had one or more psychotropic medication added were 3 times as likely to be readmitted within 30 days. Conversely, readmission was reduced by half when the focus was on optimizing (i.e., dose adjustment, switching medications, and discontinuations) rather than augmenting the medication regimen. Medication augmentation or optimization appear to have been naturally occurring, so it follows that youth experiencing augmentation may have been more troubled (this was not tested or reported in the article). However, because of the significantly higher readmission rates, the results call into question whether youth who had one or more medications added to their psychotropic regimen actually benefited from the addition.

Youth in residential treatment settings often have experienced complex life circumstances and psychosocial stressors, which may include prior traumatic or stressful life events, multiple situational factors contributing to emotional distress, and a range of disruptive behaviors. The cases often include diagnostic uncertainty, with youth showing symptoms of many disorders without presenting with "classic" symptoms of any single disorder (Handwerk et al., 2008). Collectively, these articles support the view that careful deprescribing of psychotropic medications can be safe for youth with emotional and behavioral challenges. In particular, residential treatment can provide a treatment milieu that allows for thoughtful reassessment of the clinical basis for behavioral disorders in children that can achieve the dual goals of medication reduction and behavioral stabilization (Bellonci & Huefner, 2014; Krishnan, Bellonci, Foltz, & Lieberman, 2016).

DEPRESCRIBING IN THE OUTPATIENT SETTING

The above data pertains to medication management for youth in residential treatment settings, which has distinct differences from outpatient care. The ability to work intensively with a youth in a controlled, therapeutic environment informed by data that can show the impact of medication changes in real time is a distinct advantage to deprescribing in the setting of a residential stay. Trying to replicate this in the outpatient context of a 15-minute medication check once monthly can be daunting. The implementation of "physician extenders," nurses, nurse practitioners, physician assistants, and care managers can play an important role in the outpatient setting. Their ability to gather data from the youth, the parents or caregivers, and from collateral sources such as school to show the response to deprescribing and to place that data in the context of other variables impacting the youth's functioning can make the process more streamlined and efficient.

A literature review about medication reduction, discontinuation, and deprescribing did not identify any parallel studies done in outpatient settings; yet psychotropic polypharmacy for youth is becoming increasingly common in outpatient practice (Comer et al., 2010). There is also a study that showed second-generation antipsychotic (SGA) polypharmacy happens more for youth without hospitalizations or other indicators of high clinical acuity (Kreider et al., 2014). Despite the lack of similar reports or trials looking at reducing medications in outpatient treatment, there may be some characteristics of residential treatment settings that can be replicated in outpatient practice that may facilitate deprescribing. Some principles that clinicians in outpatient practice may find useful in considering deprescribing include:

- Clinicians should provide education about medications, options for changes, and potential risks and benefits to all involved parties (i.e., youth and caregivers) at a developmentally appropriate level. Together with the youth and family, clinicians can determine which medication is least likely to continue to be indicated and target that medication for discontinuation. If the youth gives assent and the parent gives consent to deprescribing, explain what they should look for that might indicate that the medication is still warranted.
- Attention should also be paid to alternative therapeutic supports; many of the residential studies were done in settings with an intensive therapeutic milieu. This could mean increasing frequency of therapy visits, referring to structured youth groups or afterschool programs, or seeking out behavioral specialists to spend time in the home.

- Clinicians should pay close attention to the setting when considering deprescribing. The stability of the home and school environment should be considered. Targeted interventions, such as parenting classes or anger-management training, may be offered prior to or in tandem with medication changes.
- Prior to deprescribing, consider making a detailed "safety" plan with the patient and family about how behavioral escalations will be managed.
- Prior to deprescribing, use a rating scale appropriate to the condition for which the medication is being used and repeat the rating scale once the medication has been stopped after an appropriate period for the medication to clear the body based on its half-life.
- Psychiatrists should consider making themselves available by telephone for urgent concerns or schedule times to speak by phone between clinic visits, if these supports are not otherwise available to the youth and family.

DEPRESCRIBING BEST PRACTICES FOR ENHANCED CLINICAL CARE OF YOUTH

Deprescribing, like prescribing, starts with a comprehensive psychiatric assessment (see (see American Academy of Child and Adolescent Psychiatry (AACAP), 2009). This is especially important when a youth is entering the clinician's care already on medications. The clinician should make every attempt to review the records of past psychiatric treatment and any past testing to understand the rationale for the current medication regimen, and in their absence exercise sound professional judgment. Developing an independent biopsychosocial formulation is critical to guide any consideration of deprescribing. Exploring whether the current medication regimen may actually be contributing to side effects or symptoms that might be mistaken as remaining targets for medication intervention should prompt thoughtful consideration of deprescribing, rather than treatment with additional medications. Periodic reassessment of the diagnosis and formulation is indicated, especially as additional historical information is obtained and the clinician is able to observe the response to treatment interventions, including deprescribing.

Just as diagnosis and knowledge of the course of the disorder informs the decision to start a medication, it also provides guidance about whether and when to taper or discontinue a medication. Adolescents with recurrent mood disorders or with ongoing subclinical symptoms of schizophrenia will more likely be continued on medication than those with a first episode of depression, where treatment protocols typically call for gradual medication discontinuation after 6 to 12 months (AACAP, 2007a; 2007b). For the purposes of this article, we define stability as 1) showing sustained, significant symptom reduction (i.e., no longer scoring in the clinical range on a standardized rating scale); 2) no hospitalizations or signs of regression in academics, relationships, or behavior; and 3) no recent placement disruptions. When patients are stable, clinicians should periodically reassess the continued need for medication, reevaluate the risk-benefit ratio, and determine whether a trial of medication taper or discontinuation may be warranted.

Reasons to reconsider the need for a medication being prescribed either alone or in combination with other medications, that are particularly relevant for child and adolescent psychiatry, include:

- Persistent improvement in symptoms that suggests a trial off of medication is warranted, for example, a drug holiday from stimulant medication used for ADHD;
- Lack of response to medication or medication that has lost previous effectiveness in addressing the symptoms for which it was started, for example, recurrence of depression while on maintenance treatment with an SSRI;
- Development of side effects to the medication that increases health risks of continued use or makes it unsafe to continue, for example, development of pre-diabetes or diabetes while on a second-generation antipsychotic;
- Diagnostic reformulation that suggests the medication was prescribed for a condition that may not be present, such as hyperactivity representing a sequela of trauma instead of a symptom of ADHD;
- Effects of other treatment modalities that may decrease symptom severity or functional impairment, for example, cognitive behavioral therapy for anxiety disorders that result in youth effectively managing symptoms, rendering the need for an SSRI obsolete;
- Physiologic changes such as physical illness, pregnancy, or substance use that may acutely alter risk-benefit ratio or effectiveness of medication;
- Consideration of patient perspective to address non-adherence and treatment alliance, meaning respecting patient voice and maintaining treatment engagement with trials off medication, rather than parent or clinician requiring medication as part of treatment, which may lead to a youth disengagement in treatment.

DEPRESCRIBING OPERATIONALIZED

For youth on monotherapy, deprescribing consists of reducing the dose and looking for a return of the target symptoms for which the medication was originally prescribed. A medication taper would ideally be undertaken when the youth's support system can monitor for symptom changes (i.e., don't discontinue medication as the teen is about to leave for college). For youth on more than one medication concurrently, additional considerations include the following:

- Start tapering medication that has the least evidence of efficacy and/or greatest evidence of side effect risks (e.g., SGAs) in the face of either uncertain effect or a sustained period of stability (e.g., in a 6-month placebo-controlled continuation study of risperidone for aggression, 73% of those on risperidone remained in remission, but so did 58% of those on placebo; Reyes, Buitelaar, Toren, Augustyns, & Eerdekens, 2006).
- Start tapering medication that is prescribed at a supra-therapeutic dose without obvious justification.

- Start tapering medication that is prescribed at doses that are sub-therapeutic or has limited or no evidence of effectiveness for the condition it is being prescribed for (e.g., SGAs for sleep).
- When deprescribing medications, half-life and other pharmacologic properties of the medication can affect the speed at which it can safely be reduced or discontinued.
- When anticonvulsants (including benzodiazepines) are used for psychiatric reasons, it is important to remember that rapid tapering can precipitate seizures even if patients have not previously had seizures.
- When the plan is to deprescribe more than one medication, it is best to deprescribe one at a time so it is clear which taper is responsible for any adverse responses or the return of psychiatric symptoms.

Treating some medication-responsive conditions with medication may facilitate deprescribing other medications, especially those with less supported indications. Combined psychotropic and psychosocial interventions are typically more effective than either treatment alone. For example, combined SSRI and psychotherapy, such as CBT, may be more effective than either treatment alone for childhood anxiety disorders. In addition, for youth with co-occurring ADHD and disruptive behavior, whose parents are participating in parent skills training, treating ADHD with medication may further reduce disruptive behavior. This may permit deprescribing of other medications that were prescribed for the disruptive behavior.

Reassessment of the original formulation should also be considered when expected outcomes to medication trials are not achieved. When obtaining informed consent, the prescriber should outline the timeline for when benefits can be expected. The use of rating scales to track medication response can be useful. If medications do not result in the desired response, additional testing may be warranted to better determine the underlying drivers of the behavior or clinical symptoms. Thinking broadly about the clinical presentation, including any role that trauma, sensory or language deficits, developmental delays, and so forth may be contributing to the youth's presentation, should be considered in the diagnostic reformulation.

ALTERNATIVES TO MEDICATION

During the medication trial, the youth should be receiving evidence-based psychosocial therapy, teaching skills to manage the target symptoms for the prescribed medication or to implement new skills as symptoms improve on beneficial medication. If target symptoms recur in the course of a medication taper or discontinuation based on the specific clinical circumstances of the youth and the youth and family's preferences, consideration should be given whether to:

1. Provide more intensive therapeutic supports, refreshers of the skills that were taught, or booster sessions of the therapy.
2. Restart the medication or increase the dose back to the last effective dosage (this doesn't mean the child will need to remain on the medication indefinitely, and another attempt at deprescribing could be appropriate based on the clinical presentation);
3. Consider an alternative therapeutic, academic, or medication intervention.

MONITORING WHEN DEPRESCRIBING

Just as it is important to track symptoms and severity with rating scales when medication is started, it is important to collect information systematically when starting to discontinue a medication. This includes information from parents, youth, and, where relevant, school (preferably with rating scales). When team members (family, youth, school personnel, therapist, etc.) are hypervigilant about a medication change, normal responses to stressors or other variables unrelated to the deprescribing might be misinterpreted as symptom relapse. For instance, a resumption of defiance or anxiety in the context of parental rights termination or the anniversary of a traumatic event may not represent a return of symptoms due to medication discontinuation but an expected variance in the presentation consistent with the case formulation. Attention should be paid to distinguishing withdrawal symptoms from exacerbation of the underlying disorder, such as irritability as a symptom of depression versus discontinuation or withdrawal symptoms from stopping an SSRI/SNRI. Adequate time should be given to each dose adjustment to allow for resolution of withdrawal symptoms.

Once the youth is discontinued from those prescribed psychotropic medications that can be tapered, the clinician should remain available to the family as needed for support or in case symptoms resume or intensify. It is best for the youth to also continue in therapy for a period of time to ensure there is no relapse. If discontinuation of a medication is being prompted by concerning side effects, the youth should be observed to see whether the side effects have remitted following medication discontinuation. If prompted by abnormal laboratory values, follow-up studies should be completed to document normalization. If normalization does not occur or there is active symptomatology, the youth should be referred to the appropriate health care professional for treatment.

CONSIDERATIONS IN COLLABORATIVE CARE FOR PCPS MANAGING PSYCHIATRIC MEDICATIONS

With the ongoing shortage of child and adolescent psychiatrists, primary care practitioners (PCPs), including pediatricians, family medicine physicians, and nurse practitioners, often find themselves in the role of either starting or continuing the management of psychotropic medication, either with or without direct consultation with child and adolescent psychiatrists. Given lack of data and clinical consensus around deprescribing within the field of child psychiatry,

PCPs who have less training in the treatment of psychiatric disorders and the use of psychotropic medications may be particularly challenged with determining when to change or stop medications. Psychiatrists who work in collaborative care settings providing consultation to PCPs who are managing the prescribing of psychotropic medication should consider including guidance on evaluating clinical stability, when a trial of tapering or stopping a medication may be indicated, and offering details on how to deprescribe. Alternatively, in settings where psychiatrists are available longitudinally, guidance may be provided regarding a timeline for re-consulting the psychiatrist to review and provide input as to discontinuation. This may prevent prolonged use of medication beyond necessary treatment duration or unmonitored discontinuation as patient adherence wanes.

CONCLUSION

As prescribing and polypharmacy rates for children and adolescents have increased, calls for monitoring and oversight of psychotropic prescribing have likewise increased. The variability in prescribing practices in the United States raises further concerns about the quality of care being provided to youth. By addressing concerns about use of psychotropic medications, the field of child psychiatry will take a proactive step in responding to these concerns. Deprescribing offers a strategy to systematically and safely reassess the need for medications for youth. Continued research on the outcomes of our prescribing practices, including polypharmacy and the results of deprescribing as well as the functional outcomes of deprescribing, are needed.

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