

The AED Guide to Selecting Pharmacologic Treatments for Patients with Eating Disorders

On behalf of the Medical Care Standards Committee

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I. Introduction

Eating disorders are complex biopsychosocial illnesses with significant morbidity and mortality. There are three fundamental treatment modalities: nutritional rehabilitation, psychotherapy and pharmacologic treatments. Pharmacologic interventions, while possibly helpful, should be deemed secondary to nutritional rehabilitation and gold-standard psychotherapy. The goal of this guide is to provide best practices for the responsible prescribing of psychopharmacologic interventions in patients with eating disorders.

Unlike psychopharmacologic interventions in other mental health conditions, few medications have emerged as helpful in improving eating disorder behaviors and cognitions. In general, the utility of more traditional psychiatric medications in eating disorders are to treat accompanying symptoms and conditions. In the setting of undernutrition, it is widely believed that many medications are less effective before nutritional rehabilitation occurs.

Food as pharmacology: nutritional rehabilitation should be considered a pharmacologic intervention in treatment.

The intake of adequate nutrition and normalization of eating patterns is necessary to correct behavioral and physiological sequelae of eating disorders. The nutritional content, macro and micronutrient composition, and overall calories of food are all critical to healing the brain and body. A structured meal plan that ensures regularly scheduled meals and snacks improves cognitive flexibility and restores normal perceptions of hunger and satiety. As a result, food has emerged as the foundation for all treatment modalities in eating disorders in patients of all weights and regardless of specific diagnosis. Ensuring this medicine – food – is administered in the full and appropriate dose, including sufficient quantity, quality, and nutrient content, is essential for stabilization and full recovery. In this guide, we will review other medications commonly used in the treatment of eating disorders as well as their evidence base. However, we strongly encourage all clinicians to consider nutritional rehabilitation as the primary pharmacologic intervention in the care of individuals with eating disorders.

Notes on the guide

- This guide utilizes the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM 5). This usage does not imply any favor for or against this nomenclature.
- This text is not intended to be a diagnostic or therapeutic guide for eating disorders.
- This guide is intended to represent expert consensus on best practices.
- Most psychopharmacologic interventions for eating disorders are "off-label," meaning they are prescribed for indications for which they have not been formally approved and may not be officially endorsed by relevant regulatory bodies despite widespread and clinically accepted use. We encourage prescribers to review relevant regulations as this guide does not replace legal and responsible prescribing practices.
- Any new psychopharmacologic agent can have side effects. Rarely this may include a worsening of mood or agitation. We recommend close follow up after initiation of any new medication and clear safety planning.
- Medications used in managing co-occurring medical complications seen in patients with eating disorders are beyond the scope of this publication.

II. Medications in Anorexia Nervosa

Pharmacotherapy is not recommended as primary treatment for people with anorexia nervosa (AN),^{1,2} since demonstrated efficacy in clinical trials is modest, at best.³ Foremost in the treatment of those with AN is nutritional rehabilitation as it enhances cognitive function and effectiveness of psychological interventions.⁴ Indeed, many providers may defer medication initiation, particularly in new onset AN. Prior research suggests that significant malnutrition renders selective serotonin reuptake inhibitors (SSRIs) less efficacious.⁵ This decrease in efficacy must be weighed against the benefits and relative safety profile in the treatment of many mental health disorders. The following principles will apply for atypical anorexia nervosa, which describes those individuals who meet all criteria for AN, have lost a significant amount of weight, but whose weight is in the normal or above normal range.

Stepwise approach to prescribing

- Obtain a thorough history, including temporal relationship of comorbid mental health conditions and onset of eating disorder behaviors and malnutrition.
- 2. Emphasize nutritional rehabilitation and weight restoration as crucial for recovery.
- 3. Connect the patient with appropriate level of care and evidence-based psychotherapy modality.
- If co-occurring psychiatric diagnoses predate the period of weight loss or eating disorder symptoms (note that weight loss or lack of adequate weight gain can precede clinical symptoms of AN), consider initiation of medications to target associated symptoms.
- The presence of mood or other comorbid mental health disorders in first degree relatives should prompt observation for similar symptoms and possible medication initiation for those symptoms.
- If co-occurring psychiatric diagnoses preclude full engagement with weight restoration and/or engagement with evidence-based eating disorder psychotherapy, consider initiation of medications to target these symptoms.

- If a trial of evidence-based psychotherapy/ behavioral therapy does not yield improvement in eating disorder behaviors and weight restoration, consider initiation of medication.
- If after a mutually agreed upon and clinically appropriate timeline there is no significant improvement in symptoms, behaviors, and/or weight restoration, thoughtful and gradual discontinuation of medications to avoid adverse effects is recommended, in parallel with consideration of appropriate level of care.

Clinical considerations

Example 1: Anxiety, depression, obsessive compulsive disorder (OCD) or other mood disorder clearly predates the weight loss/lack of weight gain and/or onset of the eating disorder

- SSRIs can be initiated, though they are unlikely to have direct effects on weight gain.
- Purging and concurrent use of bupropion lowers the seizure threshold, defer initiation or strongly consider taper and discontinuation if already taking.

Example 2: Difficulty with weight restoration despite engagement in evidence-based psychotherapy

- Olanzapine has the strongest evidence to support weight gain in AN, though these results are modest (approximately one pound more weight gain per month for a woman of average height).
- Other appetite stimulating medications (e.g., cyproheptadine) have largely not yielded improvements in eating behaviors and/or weight gain in contrast to their efficacy in other patient populations.

Example 3: Cognitive inflexibility and entrenched AN-related symptoms

When used, second generation antipsychotics are most commonly initiated, namely olanzapine and aripiprazole, despite only modest effects on eating disorder cognitions and weight restoration. Use of these medications requires longitudinal medical monitoring because of known side effects such as orthostasis, prolonged rate-corrected QT (QTc), and abnormalities in lipid and glucose metabolism.

Example 4: Reluctance to medication initiation

Weight restoration and recovery can be anxiety provoking for many patients with AN. Recommend development of a strong therapeutic bond and identification of how the patient would like to benefit from pharmacotherapy.

Example 5: Patients experiencing immediate, high situational anxiety (for example: prior to mealtimes)

- Hydroxyzine is commonly used as a modestly sedating, non-addictive anxiolytic.
- One study examined alprazolam to alter anxiety symptoms in AN but did not find therapeutic benefit.⁶
- Clinically, however, benzodiazepines are sometimes used in supervised clinical settings to overcome high mealtime anxiety prior to development of skills in psychotherapy.
- Extreme caution should be exercised with benzodiazepines due to the potential for tolerance and dependence.

Example 6: Attention-deficit/hyperactivity disorder (ADHD) impeding ability to fully engage in treatment and recovery

- Atomoxetine, alpha agonists, and stimulants may be utilized during treatment as appropriate.
- Caution with alpha agonists, as they can exacerbate orthostasis and hypotension which are common in patients with AN.

- Caution with stimulants, as they commonly suppress appetite and cause tachycardia or inappropriate ionotropic stimulation. Those with cardiac rhythm abnormalities should not be prescribed stimulants. They also carry a potential for misuse.
- Should weight plateau or weight loss occur, strong consideration should be given to discontinuation.
- Co-occurrence of AN and ADHD is not always a reason to discontinue stimulants, particularly if malnutrition and/or onset of AN was not temporally related to the initiation of stimulants. If the stimulant dose is lowered or discontinued during treatment, careful consideration of when in the course of recovery to resume these medications is needed. Resumption shortly after a transition to less intensive treatment should be avoided.

Clinician pearls for prescribing in AN

- Close monitoring is essential when prescribing psychopharmacologic medications in patients with AN given the pharmacodynamic and pharmacokinetic changes that occur during nutritional rehabilitation, as more frequent dosage adjustments may be required.
- Polypharmacy without clear benefit can lead to adverse effects in this medically vulnerable patient population. Recommend responsible taper of medication with highest adverse effect profile and continued reassessment of utility of medications.
- Caution and monitoring are urged when prescribing additional medications known to cause prolonged rate-corrected QT (QTc) given increased risks of precipitating dangerous cardiac arrythmias.

III. Medications in Bulimia Nervosa

Unlike the paucity of evidence for pharmacotherapy in anorexia nervosa, medications have proven a reasonable, adequate, and effective component of treatment for patients with bulimia nervosa (BN). While psychotherapy is considered the treatment of choice, pharmacotherapy is typically used as an adjunctive treatment or even standalone treatment in the absence of effective psychotherapy.⁷ In one randomized, placebo-controlled trial of 120 females with BM, cognitive behavioral therapy (CBT) and medication were superior to medication alone in reducing symptoms of BN, reinforcing the need for evidence-based psychotherapy as the primary treatment.⁸ Fluoxetine is the most widely studied and robustly validated pharmacological intervention for reducing binge eating and purging behaviors, garnering Federal Drug Administration (FDA) approval for adults with BN in the United States, though most selective serotonin reuptake inhibitors (SSRIs) have been studied and appear to be helpful.

Stepwise approach to prescribing

- Obtain a thorough history, including temporal relationship of comorbid mental health conditions and onset of eating disorder behaviors and malnutrition.
- 2. Emphasize nutritional rehabilitation and weight restoration (if necessary) as crucial for recovery.
- 3. Connect the patient with appropriate level of care and evidence-based psychotherapy modality.
- If co-occurring psychiatric diagnoses predate the eating disorder, consider initiation of medications to target associated symptoms.
- The presence of mood or other comorbid mental health disorders in first degree relatives should prompt observation for similar symptoms and possible medication initiation for those symptoms.
- If co-occurring psychiatric diagnoses preclude full engagement with weight restoration and/or engagement with evidence-based eating disorder psychotherapy, consider initiation of medications to target these symptoms.

- 7. After thorough discussion of potential benefits and adverse effects, consider initiation of SSRI to help decrease binge/purge behaviors.
- In absence of compelling reason to choose a different SSRI, high dose fluoxetine (60 mg in adults) is typically favored.
- 9. If after a mutually agreed upon and clinically appropriate timescale there is no significant improvement in symptoms or behaviors despite appropriately high dose of SSRI, thoughtful and gradual discontinuation of medications to avoid adverse effects is recommended with consideration of a new trial of pharmacotherapy, in parallel with consideration of appropriate level of care.

Clinical considerations

Example 1: No reduction in binge/purge episodes on fluoxetine

- Higher-than-average doses of fluoxetine show more substantial improvements in decreasing binge/purge episodes, with increased rates of abstinence at the end of treatment.^{9, 10}
- Because fluoxetine has a favorable side effect profile and is typically well-tolerated, clinicians using this medication to decrease binge/purge episodes should routinely titrate to 60 mg as tolerated.
- Fluoxetine-driven decreases in binge eating or purging behaviors will be reliably identified by the third week of high dose fluoxetine, suggesting that early response can guide clinicians in continued use, keeping in mind the need for quick dose escalation to therapeutic dose.¹¹

Example 2: Hesitancy for medication initiation given no clear anxiety or depressive disorder

While the use of SSRIs in eating disorders is typically suited to the concomitant treatment of anxiety or depressive symptoms, improvements seen in binge/ purge behaviors with fluoxetine are independent of baseline depressive diagnosis.¹²

Example 3: Patient struggling with binging/purging and depression requests initiation of bupropion

The unique medical complications of BN, notably electrolyte abnormalities from purging behavior, places patients at an elevated risk of seizure with the use of bupropion.¹³ Thus, it is traditionally contraindicated in the treatment of BN.

Example 4: Patient on therapeutic dose of SSRI with significant emotional distress not improving with SSRI and evidence-based psychotherapy

- May consider a switch to different SSRI medication.
- Some consider augmentation with second generation antipsychotic, such as aripiprazole.
- Use of these medications requires longitudinal medical monitoring because of known side effects such as orthostasis, prolonged rate-corrected QT (QTc), and abnormalities in lipid and glucose metabolism.

Clinician pearls for prescribing in BN

- Numerous other medications have been studied in the treatment of bulimia nervosa, with other SSRI medications emerging as reasonable alternatives, particularly if fluoxetine is not well tolerated. The use of tricyclic antidepressants, trazodone, and topiramate have also been explored in adults with demonstrated efficacy, though they have not been widely adopted in specialized care settings.¹⁴
- Caution and monitoring are urged when prescribing medications known to cause prolonged ratecorrected QTc given increased risks of precipitating dangerous cardiac arrythmias in the setting of electrolyte abnormalities.
- If symptoms are not responding to medication, consider whether purging is having an impact on expected absorption of medication.
- Other alternatives to SSRIs have been explored including naltrexone¹⁵ and lamotrigine, among others.¹⁶ Naltrexone can reduce purging and/or urges and lamotrigine reduces affective instability when tried alongside psychotherapy. These studies highlight the importance of concomitant skills-based eating disorder programming to treat BN, particularly in individuals with emerging medical sequelae.

IV. Medications in Binge-Eating Disorder

Newly recognized in DSM-5 yet often undetected or underrecognized by patients and clinicians, binge-eating disorder (BED) remains the most common eating disorder globally.¹⁷ Individuals with BED may have concomitant anxiety (41%), mood disorders (49%), and substance use disorders (22%).^{18, 19} Accordingly, pharmacologic treatment in BED has often targeted both distressing binge-eating behaviors and other relevant mental health challenges in conjunction with cognitive behavioral therapies, which are the most widely utilized and studied treatment approach.²⁰ Psychotherapy should be prioritized for the treatment of BED, with adjunctive medications offered if the patient desires additional support or in the absence of access to evidence-based therapy. Lisdexamfetamine is an FDA approved medication in the USA and Canada for adults with BED. Reduction of binge eating and normalization of eating behavior are the definitions of clinically significant treatment success. The medications described below are unlikely to yield significant weight loss, which is not a recommended target of treatment.

Stepwise approach to prescribing

- Obtain a thorough history, including temporal relationship of comorbid mental health conditions and onset of eating disorder behaviors.
 - a. Confirm diagnosis, as patients in larger bodies face weight stigma in which providers overlook symptoms consistent with restrictive eating disorders, like atypical anorexia nervosa (Classified under "Other Specified Feeding and Eating Disorders" category in DSM-5).
- Clarify goals of treatment approach with each patient. Clinical improvement is measured by reduction in binge eating episodes and not degree of weight loss. Note that initial goals for the patient and provider often differ.
- Emphasize the importance of nutritional rehabilitation (scheduled, regular nutrition with appropriate variety) as crucial for recovery.
- 4. Connect the patient with appropriate level of care and evidence-based psychotherapy modality.

- If co-occurring psychiatric diagnoses predate or worsen the eating disorder symptoms, consider initiation of medications to target associated symptoms.
- The presence of mood or other comorbid mental health disorders in first degree relatives should prompt observation for similar symptoms and possible medication initiation for those symptoms.
- If a trial of evidence-based psychotherapy/ behavioral therapy does not yield improvement in eating disorder behaviors, consider initiation of medication.
- If after a mutually agreed upon and clinically appropriate timeline there is no significant improvement in symptoms and behaviors, thoughtful and gradual discontinuation of medications to avoid adverse effects is recommended, in parallel with consideration of appropriate level of care.

Clinical considerations

Example 1: Psychiatric comorbidities exacerbate or perpetuate distressing symptoms of BED

Initiate appropriate pharmacological treatment for comorbid conditions.

Example 2: Patient desires pharmacologic treatment for symptoms of BED in conjunction with evidence-based psychotherapy

- Selective serotonin reuptake inhibitors (SSRIs), particularly fluoxetine and sertraline, show reduction in distressing episodes of binge eating with minimal impact on weight.²¹
- Other antidepressants may provide a reasonable pharmacologic alternative to decrease binge eating and improve mood/anxiety.²²

Example 3: Significant impulsivity or full threshold Attention-deficit/hyperactivity disorder (ADHD) exacerbate distressing symptoms of BED

Lisdexamfetamine is an FDA approved medication in the USA and Canada for both BED and ADHD.

- Improvements in binge-eating symptoms and even clinical remission are correlated with higher doses (50 – 70mg), whereas 30 mg does not show the same degree of benefit.^{23,24}
- Caution should be exercised due to known potential for misuse and dependence, increased risk of cardiovascular events, and appetite suppression.

Example 4: Patient facing barriers to accessing evidence-based psychotherapy and wishes to initiate pharmacological treatment

- Psychiatric comorbidities initially guide medication choice if contributing to binge-eating behavior.
- If no clear comorbidity, recommend initiation of antidepressant medication to reduce binge episodes.

Clinician pearls for prescribing in BED

- Topiramate is sometimes used to reduce binge-eating episodes and suppress appetite. Utility is limited by significant side effect burden which yields high rates of discontinuation. Tolerability may be improved by evening dosing and slow titration.
- Naltrexone is a generally tolerated, long-acting opioid antagonist sometimes used to reduce binge eating episodes in BED and other eating disorders where binge eating episodes may be a presenting symptom.²⁵ More robust data are needed to draw definitive conclusions about efficacy.

- New medications for BED are under investigation for the reduction of binge eating episodes, including dasotraline, a selective dopamine and norepinephrine reuptake inhibitor²⁴ and the combination of bupropion and naltrexone.²⁶
- Most studies in the psychopharmacology of BED involve small sample sizes, homogeneous participant samples, and shorter durations than seen in clinical use. Longer duration studies and RCTs with diverse patient populations are needed.
- In higher levels of care where behaviors or psychological impairment is more severe, medications are more likely to be deployed.

V. Medications in Avoidant/Restrictive Food Intake Disorder

Due to its heterogeneous presentations and subtypes and relatively recent nosology, few studies guide evidence-based pharmacotherapy for patients with Avoidant/Restrictive Food Intake Disorder (ARFID). While body image disturbance is absent from this group of patients, pharmacotherapy options have been guided by medications demonstrating benefit in restrictive eating disorders, particularly around decreasing anxiety, improving visceral hypersensitivity, and stimulating appetite. Medication choice should be thoughtfully quided by the patient-specific features driving avoidant/ restrictive eating. Controlled trials to inform evidencebased pharmacotherapy interventions for patients with ARFID are needed as the current evidence described below is based on case reports, case series, retrospective chart review, and expert clinician consensus.

Stepwise approach to prescribing:

- Obtain a thorough history, including temporal relationship of comorbid mental health conditions and onset of eating disorder behaviors and malnutrition.
- 2. Emphasize nutritional rehabilitation and weight restoration, if needed, as crucial for recovery.
- 3. Connect the patient with appropriate level of care and evidence-based psychotherapy modality.
- 4. Thorough evaluation for comorbid psychiatric diagnoses which may contribute to avoidant/ restrictive eating.
- If co-occurring psychiatric diagnoses preclude full engagement with weight restoration and/or engagement with evidence-based eating disorder psychotherapy, consider initiation of medications to target these symptoms.
- The presence of mood or other comorbid mental health disorders in first degree relatives should prompt observation for similar symptoms and possible medication initiation for those symptoms.
- 7. Thorough evaluation of ARFID profile (low appetite and lack of interest in eating, sensory sensitivity, and/or food avoidance/fear of aversive

consequences) to best inform therapy modality and potential response to pharmacotherapy intervention.

- If a trial of evidence-based psychotherapy/ behavioral therapy does not yield improvement in disordered eating and weight restoration, consider initiation of medication to target comorbid psychiatric diagnoses and/or ARFID profile/specific symptom domains.
- 9. If after a mutually agreed upon and clinically appropriate timeline there is no significant improvement in symptoms, behaviors, and/or weight restoration, thoughtful and gradual discontinuation of medications to avoid adverse effects is recommended, in parallel with consideration of appropriate level of care.

Clinical considerations

Example 1: Patient with lack of interest in food with concurrent depression, anxiety symptoms

- Selective Serotonin Reuptake Inhibitors (SSRIs) and/or hydroxyzine may be useful adjuvant in the treatment of ARFID with lack of appetite and mood symptoms.²⁷
- Case series and retrospective chart reviews describe improvements in weight and/or mood symptoms with use of an SSRI.

Example 2: Patient with poor appetite, anxiety symptoms, delayed gastric emptying

Mirtazapine is a reasonable choice to both stimulate appetite, aid in anxiety management, and improve gastric emptying.²⁸

Example 3: Visceral hypersensitivity and/or sensory sensitivity contributing to malnutrition and avoidant/ restrictive patterns

Small case series and retrospective chart reviews describe the adjunctive use of olanzapine in patients with ARFID with success in reaching target weight or improvements in weight.^{29,30} Low doses of olanzapine were used in these studies.

- Based on the evidence above and when clinically appropriate, use low doses of second-generation antipsychotics and slowly titrate to clinical effect to minimize adverse effects.
- Use of these medications requires longitudinal medical monitoring because of known side effects such as orthostasis, prolonged rate-corrected QT (QTc), and abnormalities in lipid and glucose metabolism.

Example 4: Significant and persistent fear of aversive consequences of food intake

- SSRIs are typically first-line medication for specific anxiety leading to food avoidance.
- Low dose second-generation antipsychotics may also be considered.³¹

Clinical pearls for prescribing in ARFID

The use of buspirone and cyproheptadine are described in case reports of patients with ARFID.^{29,32} Cyproheptadine has been used in patients with feeding or eating difficulties not meeting criteria for ARFID, younger children, and/or in cases that predated the introduction of the diagnosis.³³

- Case reports describe the use of various other medications including lorazepam, buspirone, SSRIs and combinations of medications including second generation antipsychotics in the treatment of ARFID.^{32,34–37}
- Controlled trials to inform evidence-based pharmacotherapy interventions for patients with ARFID are needed. We recommend thinking critically about the ARFID subtype (low appetite and lack of interest in eating, sensory sensitivity, and food avoidance/fear of aversive consequences) and diagnostic comorbidity of each specific presentation to inform and predict response to pharmacotherapy interventions, in conjunction with evidence-based psychotherapy interventions.^{29,37}

VI. Special Considerations for Children and Adolescents with Eating Disorders

Polypharmacy and inconclusive evidence

While psychopharmacological interventions are not the primary intervention for children and adolescents with eating disorders, psychotropic prescription frequency in this population is high.^{38,39} In one large adolescent sample, approximately 30% were taking psychotropic medications and nearly 40% of these patients were prescribed multiple medications.³⁹ Despite increasing numbers of studies examining pharmacotherapy in child and adolescent patients with eating disorders, sample sizes remain small and randomized controlled trials are lacking. Inconclusive and even discouraging results underscore the lack of significant empirical data for pharmacological intervention and the importance of expeditious, evidence-based psychotherapy approaches.³⁷⁴⁰

The impact of disordered eating and weight control behaviors is particularly critical in children and adolescents, in whom growth and development is ongoing and consequences of malnutrition may prove irreversible.⁴¹ For this reason, nutritional rehabilitation is the primary treatment and should be considered superior to any pharmacological interventions for core eating disorder symptoms, including associated low mood and/or anxiety. A family-driven, youth-guided collaborative approach is imperative in addition to strong therapeutic rapport.⁴² Evidence-based therapy treatments for youth with eating disorders is based on the evidence for early and aggressive weight restoration yielding the best chance of short- and long-term recovery.^{43–45}

Scoping reviews and randomized trials

Conclusive empirical evidence for the use of psychopharmacologic interventions to target core eating disorder symptoms is not yet described. Several systematic reviews summarize the major controlled trials and other notable studies to guide medication management for children and adolescents with eating disorders.^{40,46,47} The second generation antipsychotics, notably olanzapine and aripiprazole, provide modest evidence for improvements in body mass index (BMI)/ weight trajectory and in eating disorder symptomatology.^{48–50} Heterogenous patient characteristics, short duration, recruitment biases, high drop-out rates, and small sample sizes cloud conclusions from these studies and they should be interpreted with caution given the high side effect burden from second generation antipsychotics. It may be that clinical trials have not captured subgroups of patients with eating disorders in whom the secondgeneration antipsychotics show more benefit. Clinical experience suggests these are best trialed in patients with profoundly rigid eating disorder cognitions refractory to evidence-based interventions, patients in higher levels of care, and those with recurrent inpatient hospitalization.

Stepwise approach to prescribing

- Obtain a thorough history, including temporal relationship of comorbid mental health conditions and onset of eating disorder behaviors and malnutrition.
- Emphasize nutritional rehabilitation and weight restoration as crucial for recovery and necessary for improving any mood symptoms secondary to onset of the eating disorder.
- 3. Connect the patient with appropriate level of care and evidence-based psychotherapy modality.
- If co-occurring psychiatric diagnoses predate the period of weight loss or eating disorder symptoms, consider initiation of medications to target associated symptoms.
- The presence of mood or other comorbid mental health disorders in first degree relatives should prompt observation for similar symptoms and possible medication initiation for those symptoms.
- If co-occurring psychiatric diagnoses preclude full engagement with weight restoration and/or engagement with evidence-based eating disorder psychotherapy, consider initiation of medications to target these symptoms.

- If a trial of evidence-based psychotherapy/ behavioral therapy does not yield improvement in eating disorder behaviors and weight restoration, consider initiation of medication to target deeply entrenched ED-related symptoms.
- Initiation of medications should involve informed consent from the legal guardian and a clear, developmentally appropriate explanation of risks, benefits, and potential adverse effects for the patient, who may then provide consent or assent pending age and local legal/ethical standards.
- 9. If after a mutually agreed upon and clinically appropriate timeline there is no significant improvement in symptoms, behaviors, and/or weight restoration, thoughtful and gradual discontinuation of medications to avoid adverse effects is recommended, in parallel with consideration of appropriate level of care.

Clinical pearls for prescribing in children and adolescents

Due to the paucity of data in children and adolescents, it is reasonable to extrapolate from adult studies where more robust evidence exists and safety has been demonstrated in younger populations, as in the use of fluoxetine in bulimia nervosa.

- Metabolic demands of children and adolescents differ from that of adults. They may require lower than average starting doses of psychotropic medications and/or more frequent titration.
- Adverse effect profiles may be unique in children and adolescents compared to adults.
 For example, the black box warning on antidepressants in young people, issued by the U.S.
 Food and Drug Administration (FDA), cautions prescribers to the increased risk of suicidal thoughts and behaviors.
- As is often the case in the use of clinically accepted psychoactive medications in child and adolescent psychiatry, many medications used in the treatment of eating disorders do not have approval by the FDA or other equivalent regulatory bodies.

VII. Additional Resources

- Additional information about the medical complications of eating disorders can be found here: <u>Eating Disorders: A Guide to Medical Care, 4th</u> <u>Edition</u>
- Additional information on treatment of eating disorders can be found here:
 <u>AED Guide to Selecting Evidence-based</u>
 <u>Psychological Therapies for Eating Disorders</u>
- Additional information about the nutritional complications of eating disorders can be found here: <u>Guidebook for Nutrition Treating of Eating Disorders</u>

VIII. International Consensus Guidelines for Patients with Eating Disorders

- Australia, New Zealand⁴⁴
- Denmark⁵¹
- France⁵²
- Germany⁵³
- Netherlands⁵⁴
- Spain⁵⁵
- United Kingdom⁵⁶
- United States²
- World Federation of Societies of Biological Psychiatry⁵⁷

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