Impairing Emotional Outbursts:

Parents' Medication Guide

American Academy of Child & Adolescent Psychiatry
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Impairing Emotional Outbursts: Parents' Medication Guide Work Group

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What Are Impairing Emotional Outbursts and What Is Emotion Dysregulation?

Some children become too upset, too quickly. These children often overreact to things that would not bother others. In fact, many times adults feel these children explode or have *emotional outbursts* "for no reason." We know there is a reason, however. Being able to calm down when you are upset is called *emotion regulation*. Children and adolescents who cannot do that are known as *emotionally dysregulated*. Another related term—*irritable*—is used to describe people who are easily annoyed, grouchy, lose their temper quickly, and make you feel as though you are walking on eggshells. For practical reasons, this Parents' Medication Guide will use the terms emotional outbursts, irritability, and emotion dysregulation to mean the same thing.

Learning to regulate emotions is part of growing up. All toddlers and preschoolers are still developing emotion regulation skills. Adults can help children learn how to soften their emotional reactions when things happen that they don't like. In preschool children, some sudden and intense emotional outbursts are normal and are known as *tantrums* in this age group. However, these behaviors can be outside of the range that is typical for young children if they are very frequent (one or more times a day), involve physical aggression (hitting, kicking, or biting), and/or last long enough to cause a problem. When older children still show these behaviors and they are causing problems in the family, school, and/or with friends, it may be time to investigate the problem further.

In summary, your child's emotional reactions could be classified as impairing emotional outbursts or dysregulation if they frequently and regularly get too upset or angry, for reasons that are seemingly out of proportion to the situation that may have caused the outburst, and last long enough to be a problem for your child, family, and environment.

Emotional outbursts are impairing when they happen frequently and regularly, and last long enough to be a problem for your child, family, and environment.

Assessment of Impairing Emotional Outbursts

If your child's emotional outbursts are causing distress for your child and other people, it is best to consult a qualified mental health clinician like a child and adolescent psychiatrist for a full evaluation. The evaluation should include an interview with you and your child to find out when the problem started, what makes it better or worse, whether there have been prior treatments, and what is happening before and after a typical outburst. The clinician might give you and your child's teacher a questionnaire to complete about your child's symptoms to help measure where and when problems happen and how serious they might be. Questions will also ask about symptoms related to other feelings and behaviors, and events that may have happened to your child and family. They help to measure how often the outbursts happen (frequency), how serious they are (severity), how long they last (duration), and what sets them off (precipitating events). The questionnaire in Table 1 will help you describe your child's behaviors. Teachers may complete it too.

In school, when a child is having emotional outbursts, a *functional behavioral analysis* is sometimes requested to determine the frequency, severity, and duration of outbursts, as well as school-related situations that might be occurring, like bullying or school demands that are causing stress. Finally, your clinician should ask you about your child's full developmental history, which is important to look for autism spectrum disorder or other developmental disorders.

After considering all the information, your clinician should discuss your child's diagnosis with you and provide treatment options. A big part of that discussion is working on a plan to ensure your child's safety and everyone else's safety during an outburst.

Table 1. The Emotional Outburst Inventory (EMO-I)

1. HOW EASY IS IT FOR YOUR CHILD TO GET ANGRY? (Please circle the letter of the ONE BEST response)
a. Child is rarely irritable or angry
b. Child is mostly reasonable but has days at a time when they are very touchy and get very angry, very easily.
c. Child rarely gets angry but when they do, the explosion is huge compared to the incident that provoked it.
d. Child has always been cranky and easily angered.

2. WHAT CAUSES YOUR CHILD TO GET ANGRY? (Please circle ALL THAT APPLY)		
a. Being criticized b. Misunderstanding what others are saying c. Demands aren't met immediately	d. Can't handle change in routine e. Frustrated because they can't do something (task or activity) f. Child is hungry, tired, or premenstrual	g. Other

3. WHICH OF THE FOLLOWING DOES YOUR CHILD USUALLY DO? (Please circle ALL THAT APPLY)			
a. Expresses anger in an appropriate way	no	a little	a lot
b. Argues, whines, or sulks	no	a little	a lot
c. Becomes verbally insulting, swears, shouts	no	a little	a lot
d. Threatens	no	a little	a lot
e. Slams doors, punches walls, makes a mess, destroys property	no	a little	a lot
f. Self-mutilates, bangs head, or otherwise takes it out on self	no	a little	a lot
g. Throws things	no	a little	a lot
h. Hits, kicks, bites, spits	no	a little	a lot
i. Needs physical restraint	no	a little	a lot

(Please check THE BEST RESPONSE to EACH QUESTION BELOW)
4. HOW OFTEN DOES A SERIOUS OUTBURST OCCUR?
a. Never ❑ b. Rarely ❑ c. Several times a month ❑ d. Weekly ❑ e. At least 3 times/week ❑ f. Daily ❑
5. HOW LONG DOES AN OUTBURST LAST?
a. A few minutes ❑ b. Up to15 minutes ❑ c. Up to half an hour ❑ d. Up to an hour ❑ e. Up to half a day ❑
6. IS YOUR CHILD ANGRY OR IRRITABLE BETWEEN OUTBURSTS?
a. Not at all ❑ b. Sometimes ❑ c. Often ❑ d. Very often ❑
7. HOW DOES YOUR CHILD UNDERSTAND THE OUTBURST?
a. Remorseful ❑ b. Forgets or denies it ❑ c. Blames others ❑ d. Spiteful ❑
8. WHERE DOES YOUR CHILD HAVE OUTBURSTS?
a. At home/with parents ❑ b. At school ❑ c. Both home and school ❑ d. Home, school, public ❑
9. WHAT HELPS YOUR CHILD CALM DOWN?

From Carlson et al., *Journal of Clinical Psychiatry*, in press. Reprinted with permission.

Disorders That May Be Considered When Impairing Emotional Outbursts Are Present

Many psychiatric conditions have emotion dysregulation, outbursts, or extreme irritability as one of their symptoms. Emotion dysregulation is considered a symptom or sign of a larger problem/condition. As with all areas of medical care, the pattern and other associated symptoms and circumstances must be considered in order to make an accurate diagnosis. Emotion dysregulation alone is not enough for a diagnosis. This symptom simply tells you there is a problem—not necessarily what is causing it.

Many psychiatric conditions have outbursts or extreme irritability as one of their symptoms and increase the likelihood that stress will cause outbursts. For example, a child having these types of emotional outbursts may have **attention-deficit/hyperactivity disorder (ADHD),** in which acting before thinking and problems coping with frustration may lead to outbursts. **Oppositional defiant disorder (ODD),** which describes children who are easily annoyed and are constantly arguing, may lead to severe outbursts that happen very often. Mood disorder symptoms, in both **depression** and **mania** include irritability. For these mood disorders, the irritability is usually a change from how the child usually behaves. Children who have **anxiety disorders** can have severe outbursts if forced to face something which frightens them and are trying to avoid. These children may run away, shut down, or have an emotional outburst. Children who have experienced stressful life events, **trauma**, or life-threatening situations will sometimes have emotional outbursts when there are reminders of the trauma. Children with **developmental disorders** like **autism spectrum disorder** have problems with emotion regulation and can have outbursts when they are upset by change in routine or environment, they are overwhelmed by loud noises or bright lights, or they don't understand what is being said to them. Finally, some conditions like **disruptive mood dysregulation disorder (DMDD)** and **intermittent explosive disorder** are primarily characterized by outbursts.

Outbursts may also occur with some medical problems like epilepsy (seizures) or some hormone problems (such as diabetes or thyroid issues). Children with head injuries or brain swelling may have increased irritability. Your child's clinician may talk with a pediatrician to check on any medical concerns, who may arrange for further medical tests such as blood work or tests to check the brain.

These are a few examples but do not cover every possibility, as there are many different possibilities for the complicated causes of your child's emotional outbursts. Child and adolescent psychiatrists and other clinicians are trained to do the complex evaluation that is necessary and may work with other types of doctors and specialists to do so. Whatever the diagnosis, it is important to understand what causes the emotional outbursts, what helps to end them, and how to prevent them in the first place.

Treatment of Impairing Emotional Outbursts/Dysregulation

Treatment of emotion dysregulation requires a comprehensive approach. The first step is to treat any reasons for the emotional outbursts, which include underlying medical conditions and/or one or more psychiatric disorders. Non-medication treatments are important parts of helping a child with outbursts as well as helping parents and caregivers learn skills to deal with outbursts and learn to prevent them. These can include starting therapy, where your child can learn skills to deal with stress, and working with the school to make a plan (such as an Individualized Education Plan [IEP]) to help them get along and learn in the classroom.

Role of medications

If non-medication treatments are not working well enough, or if the outbursts are severe and impairing, medication may be recommended. See Table 2 for more details on the medications used to treat outbursts. Depending on the kind of medications being prescribed, medical tests may be necessary before starting a medication. For example, when prescribing lithium, your child's clinician will check the level of thyroid hormones and kidney function. If your child is prescribed certain other medications, it will be important to check the levels of lipids and glucose in the blood. If there are concerns in the child or family about heart problems, the clinician may request an electrocardiogram (ECG) that looks at heart rhythm before prescribing a stimulant medication for ADHD. Some of the medications, like lithium and divalproex (Depakote), need regular check of their blood levels to determine if the medication is too high, too low, or just right.

When the clinician chooses a medication, the first step is to treat the psychiatric disorder felt to be causing the outbursts. This can often lead to the outbursts getting much better. Keeping track of how often the outbursts happen, how long they last, and how bad they are can help your clinician figure out what medication to recommend.

Keeping track of how often the outbursts happen, how long they last, and how bad they are can help your clinician figure out what medication to recommend.

Table 2.

Common Disorders With Outbursts and Medications Used in Children		
Associated Disorder	**Medication Class**	**Medication Example(s)**
ADHD + aggression (Refer to AACAP ADHD: Parents' Medication Guide for full list)	Stimulants: a. Methylphenidate	Adhansia* Aptensio* Concerta* Cotempla* Daytrana patch* Focalin* Jornay* Metadate* Quillivant* Quillichew* Ritalin*
	b. Amphetamine	Adderall* Adzenys* Dexedrine* Dynavel* Evekeo* Mydayis* Procentra* Vyvanse* Zenzedi*
	Nonstimulants	Atomoxetine (Strattera)* Clonidine (Kapvay)* Guanfacine (Intuniv)* Viloxazine (Qelbree)*
	Second-generation antipsychotics (SGA)	Risperidone (Risperdal) Aripiprazole (Abilify)
Anxiety/Obsessive–Compulsive Disorder (OCD) (Refer to AACAP Anxiety Disorders: Parents' Medication Guide)	Selective serotonin reuptake inhibitors (SSRIs)	Citalopram (Celexa) Escitalopram (Lexapro) Fluoxetine (Prozac)* Fluvoxamine (Luvox)* Sertraline (Zoloft)*
	Serotonin norepinephrine reuptake inhibitors (SNRIs)	Duloxetine (Cymbalta)* Venlafaxine ER (Effexor)
	Second-generation antipsychotics (SGA)	Aripiprazole (Abilify) Olanzapine (Zyprexa) Quetiapine (Seroquel) Risperidone (Risperdal)
Post-traumatic Stress Disorder (PTSD)	Alpha2-agonists	Clonidine (Kapvay) Guanfacine (Intuniv)
Autism Spectrum Disorder (Refer to AACAP Autism Spectrum Disorder: Parents' Medication Guide)	Alpha2-agonists	Clonidine (Kapvay) Guanfacine (Intuniv)
	Second-generation antipsychotics (SGA)	Aripiprazole (Abilify)* Risperidone (Risperdal)*

continued on next page

Bipolar Disorder (Refer to AACAP Bipolar Disorder: Parents' Medication Guide)	Second-generation antipsychotics (SGA)	Aripiprazole (Abilify)* Asenapine (Saphris)* Lurasidone (Latuda)* Olanzapine (Zyprexa)* Quetiapine (Seroquel)* Risperidone (Risperdal)*
	Antiepileptics/mood stabilizers	Divalproex (Depakote) Lamotrigine (Lamictal)
	Other	Lithium*
Disruptive Mood Dysregulation Disorder (DMDD)	Selective serotonin reuptake inhibitors (SSRIs)	Citalopram (Celexa) Fluoxetine (Prozac)
	Second-generation antipsychotics (SGA)	Aripiprazole (Abilify) Risperidone (Risperdal)
Major Depressive Disorder (MDD) (Refer to AACAP Depression: Parents' Medication Guide)	Selective serotonin reuptake inhibitors (SSRIs)	Escitalopram (Lexapro)* Fluoxetine (Prozac)*
	Serotonin norepinephrine reuptake inhibitors (SNRIs)	Duloxetine (Cymbalta) Venlafaxine ER (Effexor)
	Second-generation antipsychotics (SGA)	Aripiprazole (Abilify) Lurasidone (Latuda) Olanzapine (Zyprexa) Quetiapine (Seroquel) Risperidone (Risperdal)
Tics/Tourette's Disorder	Alpha2-agonists	Clonidine (Kapvay) Guanfacine (Intuniv)
	First-generation antipsychotics (FGAs)	Haloperidol (Haldol)* Pimozide (Orap)*
	Second-generation antipsychotics (SGAs)	Aripiprazole (Abilify)* Olanzapine (Zyprexa) Risperidone (Risperdal)

Note: All medications are "off label" for outbursts because the FDA mostly approves medications for diagnoses and "outbursts" are not a diagnosis. Medications with an asterisk (*) have been specifically studied and approved for treating the specific disorder. Sometimes, though, there have been studies showing the medication is effective and so the medication is used even without FDA approval, and is therefore "off label." Please refer to the Parents' Medication Guide links included in this table and also listed under resources, including links to the guides on ADHD, depression, autism spectrum disorder, bipolar disorder, and anxiety.

Side effects

All medications may be associated with side effects. It is important for you and your child's prescriber to discuss both how the medication could help your child (for example, which symptoms the medications are intended to treat) and what some of the common and rare side effects are (see Table 3).

Table 3.

Side Effects of Medications Sometimes Used for Conditions With Outbursts

Medication Class	Side Effects
Antidepressants: Selective Serotonin Reuptake Inhibitors (SSRIs)	**Common:** Headache, trouble sleeping, diarrhea, decreased appetite, hyperactivity/restlessness, vomiting, increased anger/irritability, problems with sexual desire or performance, muscle pain, weight loss/gain **Serious:** Suicidal thinking and behavior in children, adolescents, and young adults; possible heart rhythm problems; mania **Very Rare but Serious:** Serotonin syndrome (occurs with high levels of serotonin in the body). Symptoms of serotonin syndrome may include fever, confusion, tremor, restlessness, sweating, and bleeding problems.
Serotonin Norepinephrine Reuptake Inhibitors (SNRIs)	**Common:** Sleepiness, trouble sleeping, restlessness, problems with sexual desire or ability to perform, headache, dry mouth, increased anger/irritability, increased blood pressure, increased heart rate, muscle pain, weight loss/gain **Serious but Rare:** Suicidal thinking and behavior in children, adolescents, and young adults; mania **Very Rare but Serious:** Serotonin syndrome (occurs with high levels of serotonin in the body), bleeding problems
Antiepileptics/ Mood Stabilizers: Divalproex (Depakote)	**Common:** Nausea, increased appetite, sleepiness, weight gain, increase in lipids (fats in the blood), bleeding problems, hair loss, shaking, vomiting **Very Rare but Serious:** Damage to liver and pancreas, low salt levels in the blood, low numbers of red blood cells and cells that help with clotting, a hormonal disorder called polycystic ovary syndrome (females only)
Lamotrigine (Lamictal)	**Common:** Mild sleepiness, trouble concentrating, blurred vision, dizziness, rash **Very Rare but Serious:** Low numbers of white blood cells, life-threatening skin conditions (Stevens-Johnson syndrome, toxic epidermal necrolysis)
Lithium	**Common:** Nausea, blurred vision, some loss of coordination, slurred speech, hair loss, weight gain, trembling hands, increased thirst and urination, acne **Very Rare but Serious:** Vomiting, seizures, uncontrolled jerky movements in arms and legs, coma, decrease in the thyroid's ability to work well, kidney problems, changes in heart rhythm *Note: Your child's blood levels will need to be checked regularly to prevent too high of a dose of lithium in the body.*
First-Generation Antipsychotics (FGA)	**Common:** Fatigue, muscle stiffness, tremor, restlessness, unwanted muscle movements, increased level of the hormone prolactin **Very Rare but Serious:** Neuroleptic malignant syndrome which includes muscle stiffness, high fever, racing heartbeat, fainting spells, and feeling extremely ill
Second-Generation Antipsychotics (SGA)	**Common:** Restlessness, dizziness or fainting because of low blood pressure when standing up (orthostasis), increased appetite, weight gain, tiredness, drowsiness, nausea, unwanted muscle movements, heartburn, increase in cholesterol and blood sugar, increase in the hormone prolactin, changes in heart rhythm especially with ziprasidone **Very Rare but Serious:** Neuroleptic malignant syndrome which includes muscle stiffness, high fever, racing heartbeat, fainting spells, and feeling extremely ill. Increased risk for seizures at high doses.
Stimulants	**Common:** Poor appetite, weight loss, difficulty sleeping, headaches, stomachaches, possible slowed growth **Very Rare but Serious:** Aggressive behavior, psychosis, heart problems
Alpha2-agonists	**Common:** Drowsiness, dizziness, fainting, irritability, constipation, dry mouth **Rare but Serious:** Slowing of heart rate, lowering of blood pressure

The main goal of treatment is the return to age-appropriate behavior at home, school, and in other settings, so that your child and family can enjoy a healthier and happier life together.

Most of the medications prescribed to your child need to be taken every day. Some of the medications, like stimulants, can be stopped during the summer breaks and holidays. Your prescriber may recommend these drug holidays to reduce the amount of medication your child is taking.

If your child continues to have outbursts after treatment with one medication, your child's clinician may choose to add another medication. Adding another medication depends on the child's diagnosis. It is important to talk to your child's clinician about what is being treated with more than one medication. Emotional outbursts may take a while to improve, and may not completely go away, even when treated with more than one medication or behavioral treatment. At that point, it may be helpful to talk more about options with the clinician.

You may wonder how long your child needs to take medication. Ask your child's clinician when and how the medication may be stopped. Many medications cannot be stopped all of a sudden and should be decreased slowly. Deciding when to stop a medication can be as important as starting and combining medication. The main goal of treatment of any psychiatric disorder, including those with outbursts, is the return to age-appropriate behavior at home, school, and in other settings, so that your child and family can enjoy a healthier and happier life together.

Resources

- **ADHD: Parents' Medication Guide**
  Click here to access the *ADHD: Parents' Medication Guide* from AACAP.
- **Anxiety Disorders: Parents' Medication Guide**
  Click here to access the Anxiety Disorders: Parents' Medication Guide from AACAP
- **Autism Spectrum Disorder: Parents' Medication Guide**
  Click here to access the *Autism Spectrum Disorder: Parents' Medication Guide* from AACAP.
- **Bipolar Disorder: Parents' Medication Guide**
  Click here to access the *Parents' Medication Guide for Bipolar Disorder in Children & Adolescents* from AACAP.
- **Depression: Parents' Medication Guide**
  Click here to access the *Depression: Parents' Medication Guide* from AACAP.
- **The Emotional Outburst Inventory (EMO-I)**
  Click here to access the Emotional Outburst Inventory (EMO-I) from AACAP.

Medication Tracking Form

Use this form to track your child's medication history. Bring this form to appointments with your provider and update changes in medications, doses, side effects and results.

Date	Medication	Dose	Side Effects	Reason for keeping/stopping

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