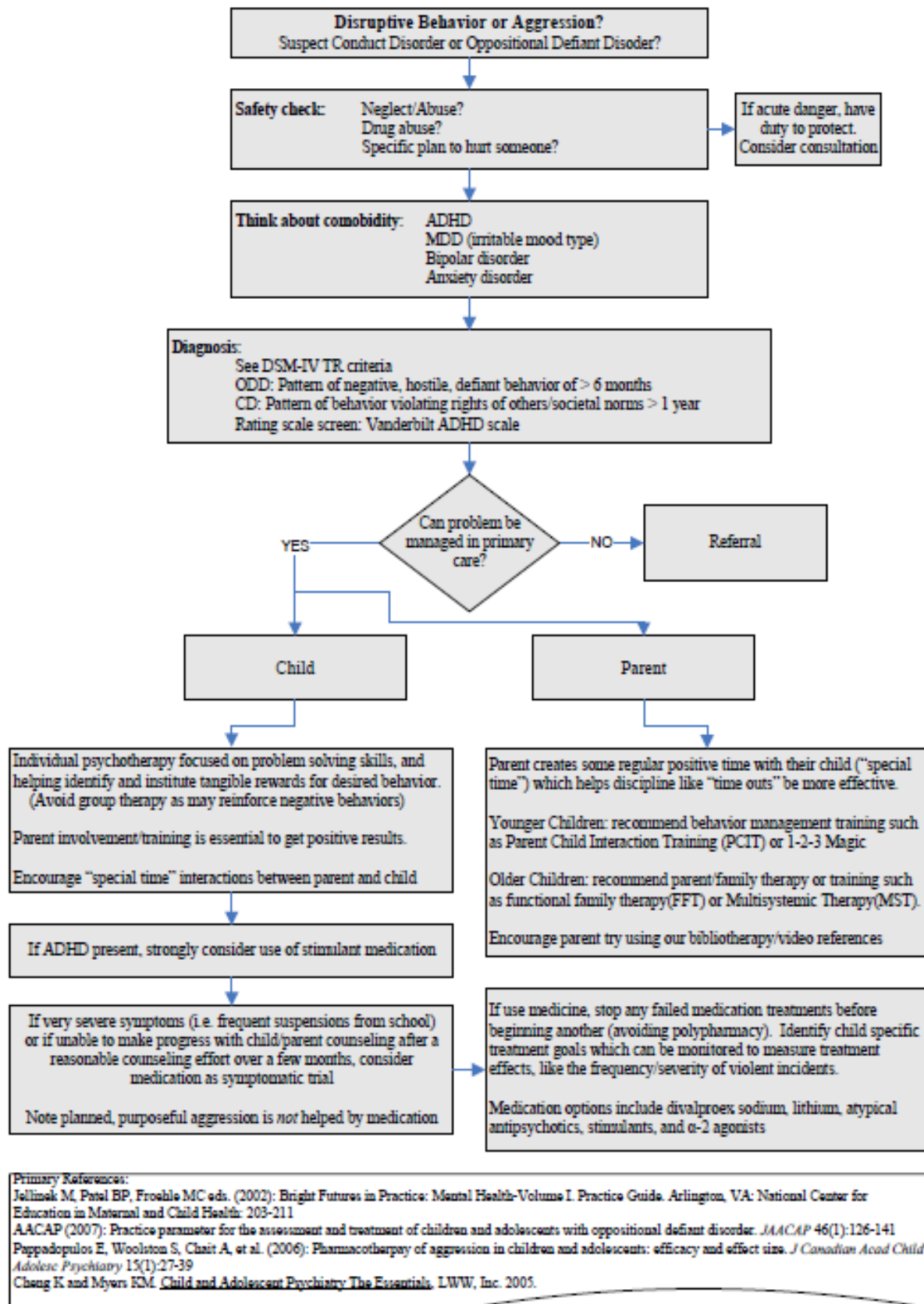


Disruptive Behavior and Aggression



Non-Specific Medications for Disruptive Behavior and Aggression

- If used, choosing a single medication is strongly recommended over polypharmacy
- Establish a specific target to treat, and measure the response over time (such as anger explosion frequency, duration)
- Aggression is not a diagnosis—continue to look for and treat what may be the cause, usually prescribing psychotherapy

Drug Name	Dosage Form	Start Dose	Sedation	Weight Gain	Extra-pyramidal symptoms	(+) RCT evidence in kids*	Editorial Comments
Risperidone (Risperdal)	0.25, 0.5, 1, 2, 3, 4mg 1mg/ml	0.25 mg QHS	+	+	+	Yes	Most researched med in kids of the group
Aripiprazole (Abilify)	2, 5, 10, 15, 25, 30mg 1mg/ml	2 mg QD	+	+	+/-	No	Long ½ life, takes weeks to build effect
Quetiapine (Seroquel)	25, 50, 100, 200, 300, 400mg	25 mg QHS	++	+	+/-	No	Pills larger, could be hard for kids to swallow
Ziprasidone (Geodon)	20, 40, 60, 80mg	20 mg QHS	+	+	+/-	No	Greater risk of QT lengthen, EKG check
Olanzapine (Zyprexa)	2.5, 5, 7.5, 10, 15, 20mg	2.5 mg QHS	++	++	+/-	No	Greatest risk of weight gain, ↑cholesterol

Table + and – from Fedorowicz VJ, Fombonne E. (2005), Lublin, H; et al (2005), and Correll CU et al (2009)

*Pappadopulos E et al., J Cdn. Acad. Child Adol. Psych. (2006)

Monitoring for all atypical antipsychotics: AIMS exam at baseline and Q6months due to risk of tardive dyskinesia. Warn of dystonia risk. Weight checks, fasting glucose/lipid panel Q6months at minimum.

Other Medication Options

Drug Name	Description	(+) RCT evidence in kids*	Monitoring	Editorial Comments
Lithium	A salt, is renally excreted	Yes	Baseline EKG, BUN/ creat, TSH, CBC. Lithium level after 5 days. Q3month Li. Q6mo TSH, BUN/crt	Sedating, weight gain, Renal and thyroid toxicity. If dehydration can get acute toxicity. Reduces suicide risks, though an overdose can be fatal
Valproate	Anti-seizure	Yes	CBC, LFT at baseline, in 3 month, then Q6month. VPA level checks needed	Sedating, weight gain, rare severe toxicity of liver, ↓platelets
Carbamazepine	Anti-seizure	No	CBC, LFT at baseline, then every 3-6 months. CBZ level checks needed	Aplasia and rash risk. Note a negative result trial with kids and oxcarbazepine & bipolar disorder
Clonidine, Guanfacine	α-2 agonists	Yes	Pulse, BP	Orthostasis, sedation sign of excess dose, avoid high doses, rebound hypertension if quick stop

*Pappadopulos E et al. (2006) and lit. review

None of the medications on this page are FDA approved for aggression treatment, with the exception of risperidone which is approved for irritability/aggression treatment in autism.

ABNORMAL INVOLUNTARY MOVEMENT SCALE (AIMS)

INSTRUCTIONS: COMPLETE EXAMINATION PROCEDURE BEFORE MAKING RATINGS. MOVEMENT RATINGS: RATE HIGHEST SEVERITY OBSERVED, RATE MOVEMENTS THAT OCCUR UPON ACTIVATION ONE LESS THAN THOSE OBSERVED SPONTANEOUSLY.

CODE 0 = NONE
1 = MINIMAL, MAY BE EXTREME NORMAL
3 = MODERATE
2 = MILD
4 = SEVERE

EXAMINATION PROCEDURE

EITHER BEFORE OR AFTER COMPLETING THE EXAMINATION PROCEDURE OBSERVE THE PATIENT UNOBTUSIVELY AT REST (E.G., IN WAITING ROOM). THE CHAIR TO BE USED IN THIS EXAMINATION SHOULD BE A HARD, FIRM ONE WITHOUT ARMS.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. ASK PATIENT WHETHER THERE IS ANYTHING IN HIS/HER MOUTH (I.E., GUM, CANDY, ETC.) AND IF THERE IS, TO REMOVE IT. 2. ASK PATIENT ABOUT THE CURRENT CONDITION OF HIS/HER TEETH. ASK PATIENT IF HE/SHE WEARS DENTURES. DO TEETH/DENTURES BOTHER PATIENT NOW? 3. ASK PATIENT WHETHER HE/SHE NOTICES ANY MOVEMENTS IN MOUTH, FACE, HANDS, OR FEET. IF YES, ASK TO DESCRIBE AND TO WHAT EXTENT THEY CURRENTLY BOTHER PATIENT OR INTERFERE WITH HIS/HER ACTIVITIES. 4. HAVE PATIENT SIT IN CHAIR WITH HANDS ON KNEES LEGS SLIGHTLY APART AND FEET FLAT ON FLOOR. (LOOK AT ENTIRE BODY FOR MOVEMENTS WHILE IN THIS POSITION) 5. ASK PATIENT TO SIT WITH HANDS HANGING UNSUPPORTED. IF MALE, BETWEEN LEGS; IF FEMALE AND WEARING A DRESS, HANGING OVER KNEES (OBSERVE HANDS AND OTHER BODY AREAS.) 6. ASK PATIENT TO OPEN MOUTH. (OBSERVE TONGUE AT REST WITHIN MOUTH,) DO THIS TWICE. | <ol style="list-style-type: none"> 7. ASK PATIENT TO PROTRUDE TONGUE. OBSERVE ABNORMALITIES OF TONGUE MOVEMENT.) DO THIS TWICE. *8. ASK PATIENT TO TAP THUMB WITH EACH FINGER, AS RAPIDLY AS POSSIBLE FOR 10-15 SECONDS; SEPARATELY WITH RIGHT HAND, THEN WITH LEFT HAND. (OBSERVE FACIAL AND LEG MOVEMENTS.) 9. FLEX AND EXTEND PATIENT'S LEFT AND RIGHT ARMS (ONE AT A TIME). (NOTE ANY RIGIDITY AND RATE ON DOTES.) 10. ASK PATIENT TO STAND UP. (OBSERVE IN PROFILE. OBSERVE ALL BODY AREAS AGAIN. HIPS INCLUDED.) *11. ASK PATIENT TO EXTEND BOTH ARMS OUTSTRETCHED IN FRONT WITH PALMS DOWN. (OBSERVE TRUNK, LEGS, AND MOUTH.) *12. HAVE PATIENT WALK A FEW PACES, TURN, AND WALK BACK TO CHAIR. (OBSERVE HANDS AND GAIT) DO THIS TWICE. <p>** ACTIVATED MOVEMENTS</p> |
|---|--|

FACIAL AND ORAL MOVEMENTS:	1. MUSCLES OF FACIAL EXPRESSION E.G., MOVEMENTS OF FOREHEAD, EYEBROWS, PERIORBITAL AREA, CHEEKS; INCLUDE FROWNING, BLINKING, SMILING, GRIMACING	0	1	2	3	4
	2. LIPS AND PERIORAL AREA E.G., PUCKERING POUTING, SMACKING	0	1	2	3	4
	3. JAW E.G., BITING CLENCHING, CHEWING, MOUTH OPENING, LATERAL MOVEMENT	0	1	2	3	4
	4. TONGUE RATE ONLY INCREASE IN MOVEMENT BOTH IN AND OUT OF MOUTH. NOT INABILITY TO SUSTAIN MOVEMENT	0	1	2	3	4
EXTREMITY MOVEMENTS	5. UPPER (ARMS, WRISTS HANDS FINGERS INCLUDE CHOREIC MOVEMENTS (I.E., RAPID, OBJECTIVELY PURPOSELESS, IRREGULAR SPONTANEOUS). ATHETOID MOVEMENTS (I.E., SLOW IRREGULAR, COMPLEX SERPENTINE). DO NOT INCLUDE TREMOR (I.E., REPETITIVE, REGULAR, RHYTHMIC)	0	1	2	3	4
	6. LOWER (LEGS, KNEES, ANKLES, TOES) E.G., LATERAL KNEE MOVEMENT, FOOT TAPPING, HEEL DROPPING, FOOT SQUIRMING, INVERSION AND EVERSION OF FOOT					
TRUNK MOVEMENTS:	7 NECK, SHOULDERS, HIPS E.G., ROCKING, TWISTING, SQUIRMING PELVIC GYRATIONS	0	1	2	3	4
GLOBAL JUDGMENTS:	8 SEVERITY OF ABNORMAL ACTION	0	1	2	3	4
	9 INCAPACITATION DUE TO ABNORMAL MOVEMENTS	0	1	2	3	4
	10. PATIENT'S AWARENESS OF ABNORMAL MOVEMENTS	0	1	2	3	4
DENTAL STATUS:	11 CURRENT PROBLEMS	0	1	2	3	4
	12 DOES PATIENT USUALLY WEAR DENTURES?	0	1	2	3	4

NOT APPLICABLE: PATIENT HAS NO HISTORY OF TREATMENT WITH NEUROLEPTICS FOR ONE MONTH OR MORE.

EXAMINATION COMPLETED

PHYSICIAN'S
SIGNATURE _____

DATE OF
EXAMINATION _____

REVISED 03/20/97

Public domain, formatted by University of Massachusetts Medical Center Adult Mental Health Unit

*Monitoring for all atypical antipsychotics: AIMS exam at baseline and ~Q6months due to risk of tardive dyskinesia.
Warn of dystonia risk. Weight checks, fasting glucose/lipid panel ~Q6months at minimum.*

Time Out

“Time out” means taking a specific time away from attention, interesting activities, rewards or other reinforcement. It usually means placing the child in a dull, boring place immediately following an undesired behavior, and having them remain there for a specific amount of time. Time out can also involve a temporary loss of parental attention or interaction in situations where the physical space is limited (like no talking for 5 minutes while riding in a car).

It is often said that the length of time out should be one minute for each year of age, but adjustments need to be made based on developmental level—for instance a developmentally delayed child should have their time out times significantly reduced.

Time outs are simple in concept, but can be hard to implement. Here are some tips for greater success:

- **Set limits that are consistent**—if a given child behavior requires a time out one day it should always get that response. Inconsistency leads to more testing of the limits.
- **Focus on changing only one or two types of misbehavior at a time.** For instance if hitting a sibling is the main concern, focus your efforts on consistent time outs for that behavior and try to let other things slide for a while until you have results.
- **When you announce the time out, do not continue to engage verbally with your child.** This is very important—children that continue to verbally engage with you, bargain, plead, and yell back and forth with you will not receive the benefit from a time out because they are in essence receiving MORE attention from you during a time out rather than less. You can’t control what their mouth does, but you can control your own. Remain calm, and refuse to take the bait.
- **Time outs should occur *immediately* after misbehavior.** A time out many minutes later sends a confused message. Delaying a time out by lecturing the child before the time out also hurts the process. The action of being quietly brought to a time out location and having no verbal interaction from you speaks far more loudly than any words can.
- **If giving a warning before use of time out, make it count.** For instance saying “one more time and you will get a time out” needs to be followed up by actually bringing the child calmly to time out if they do “it” one more time.
- **Remember that kids enjoy making a splash.** Like throwing rocks in the water, triggering a parent to lose their cool can be interesting or satisfying for a child. Keeping your cool when setting limits keeps from inadvertently reinforcing their behavior to occur again.
- **You determine when the time out is over, not the child.** Setting a timer can make this seem less arbitrary to the child. Don’t be punitive with your child immediately after time out (e.g., lecturing, having your child apologize to you). Simply “resume business as usual” or congratulate them on regaining personal control. *Actively look for the next positive behavior to praise.*

Special Time

Sometimes called “Child Directed Play”

A strength based approach to overall child behavior problems.

Goal of this is to establish regular times when parent and child have a positive experience in each other's presence, supporting family self confidence, pleasure and hope. Regular special time together is like money in the bank that lessens times of crisis and re-establishes motivation for positive behaviors. Families often find that time-outs work better after initiating special time.

How to do special time:

- Important to be done regularly, every day is optimal, but two or three times a week consistently is OK. Siblings should receive equal opportunity.
- Child picks activity, which needs to be something the parent does not actively dislike doing and which does not involve spending money or completing any task or chore.
- Parent picks time of day.
- Label it “special time.”
- Pick a time short enough that it can be done reliably as scheduled, usually 15-30 minutes.
- Do it no matter how good or bad the day was.
- One on one without interruption.
- End on time: may use a timer to help. Remind child when the next special time will be. May play with the child more after a break from each other.
- If the child refuses at first, tell the child that you will just sit with him/her for a while, and/or that you will continue to invite the child to participate when next special time is scheduled.
- Parent also needs to have some special time for him/herself. This is often a prerequisite for the parent to do special time with the child.

Treating Disruptive Behavior and Aggression Using Functional Analysis

Identify the behavior

Character	<i>(what they do)</i>
Timing	<i>(especially noting provoking and reinforcing factors)</i>
Frequency	<i>(times per day or per week)</i>
Duration	<i>(i.e. 30 minute behaviors are different than 30 second behaviors)</i>

Analyze and make hypotheses about the function of the behavior

- **Communication.** This is the primary etiology to investigate for young children or if a child lacks communication skills. Maladaptive behavior may communicate *physical discomfort* like pain, GI distress or illness. It may also communicate *emotional discomfort* like boredom, anxiety, anger, frustration, sadness, or over-excitement.
- **Achieving a goal.** How does performing the behavior benefit the child, what does he/she gain? This might include escaping an undesired situation, avoiding a transition, acquiring attention, or getting access to desired things like toys or food.
- **No function.** If there is *no* function identifiable for the behavior, this suggests causes like seizures, medication side effects, sleep deprivation, and other medical or psychiatric disorders.

Modify the environment by changing provoking and reinforcing factors.

- Enhance communication—could try naming the thoughts or feelings that you believe the child may be having, like “I see that you want to eat right now.”
- Use simple, concrete sentences and questions with child.
- Remain calm since your emotional reaction may reinforce an undesired behavior.
- Increase structure—provide schedule of day’s events, use routines, anticipate transitions. Describe an upcoming routine to prepare for new situations. Teach child how to ask for help and how to tell adults when they need a break.
- Modify demands—match the task to their developmental stage & language ability. Limit time for tasks, schedule fun activities after less preferred ones.
- Allow child access to a time-limited escape to a calm, quiet place if overwhelmed.
- Reinforce positive behavior with attention and praise, find out what child finds rewarding (special activity, food, favorite toy, a gold star, etc.)
- Avoid reinforcing maladaptive behavior with attention or other gains.
- Schedule special, non task-driven, time for child and parents together that is honored and not conditional on other behaviors.

Consult with a behavioral specialist to facilitate process and support family.

- Behavior modification specialists can make tailored suggestions for the family’s situation.
- If behavior is at school, consult with the school psychologist for a behavioral intervention.

If strategies are insufficient or behavior is severe, or places child or others at risk of harm, consider augmentation with medications.

- See Care Guide section, “Non-Specific Medications for Disruptive Behavior and Aggression”.

Disruptive Behavior and Aggression Resources

Information for Families

Books parents may find helpful:

The Explosive Child (2001), by Ross Greene, PhD

The Difficult Child (2000), by Stanley Turecki, MD and Leslie Tonner

1-2-3 Magic: Effective Discipline for Children 2-12 (2004), by Thomas Phelan, PhD

How to Raise an Emotionally Intelligent Child (1998), by John Gottman, PhD

SOS Help for Parents (2006), by Lynn Clark, PhD

Parenting Your Out-of Control Teenager: 7 Steps to Reestablish Authority and Reclaim Love (2001),
by Scott P. Sells, PhD

Videos parents may find helpful:

1-2-3 Magic: Managing Difficult Behaviors, by Thomas Phelan, PhD

Managing the Defiant Child, by Russell Barkley, PhD

The Kazdin Method for Parenting the Defiant Child (book with DVD), by Alan Kazdin and Carlo Rotella

Raising an Emotionally Intelligent Child, by John Gottman, PhD

Websites families may find helpful:

American Academy of Child Psychiatry oppositional defiant disorder resources
www.aacap.org/cs/ODD.ResourceCenter

The Incredible Years training programs
www.incredibleyears.com