

Guiding Principles and Practices: Caring for Youth Exhibiting Aggressive Behavior: Conceptualization Behavioral Escalation

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Learning Objectives

At the conclusion of this module, learners will be able to:

- Develop a conceptual framework to understand the antecedent risk factors predisposing and precipitating aggression, including factors that perpetuate aggression
- Explore current evidence-based practices in the evaluation and management of pediatric aggression
- Discuss and practice specific strategies to support youth at-risk for aggressive behavior and their families

CASE

11-year-old with borderline cognitive functioning noted to be highly impulsive, inattentive, with periods of aggression.

- History of fetal alcohol syndrome, obesity and obstructive sleep apnea
- Functions at level of 7-year-old and is somewhat verbal
- Currently prescribed sertraline for presumed anxiety
- Seen remotely by developmental-behavioral pediatrics
- No current psychotherapy
- Has a 6-month-old sibling, parents are separated and patient lives with mother and mother's boyfriend
- Transportation and finances can be a challenge
- The family lives in an older home in a more rural neighborhood

Agitation and Aggression

Key Definitions:

Agitation: State of increased **cognitive, emotional** and **motoric** activity, associated with a **heightened autonomic response** that is related to **antecedent stressors** and intrinsic **patient-related factors**.

Aggression: Any verbal or physical behavior that places oneself or others at harm or may result in damage to property.

VITAL SIGNS

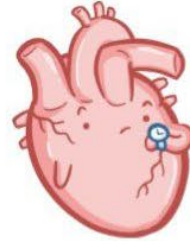
BODY
TEMPERATURE



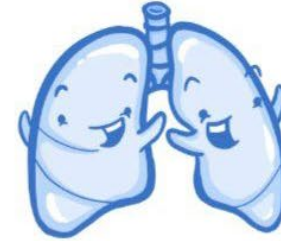
BLOOD
PRESSURE



HEART
RATE



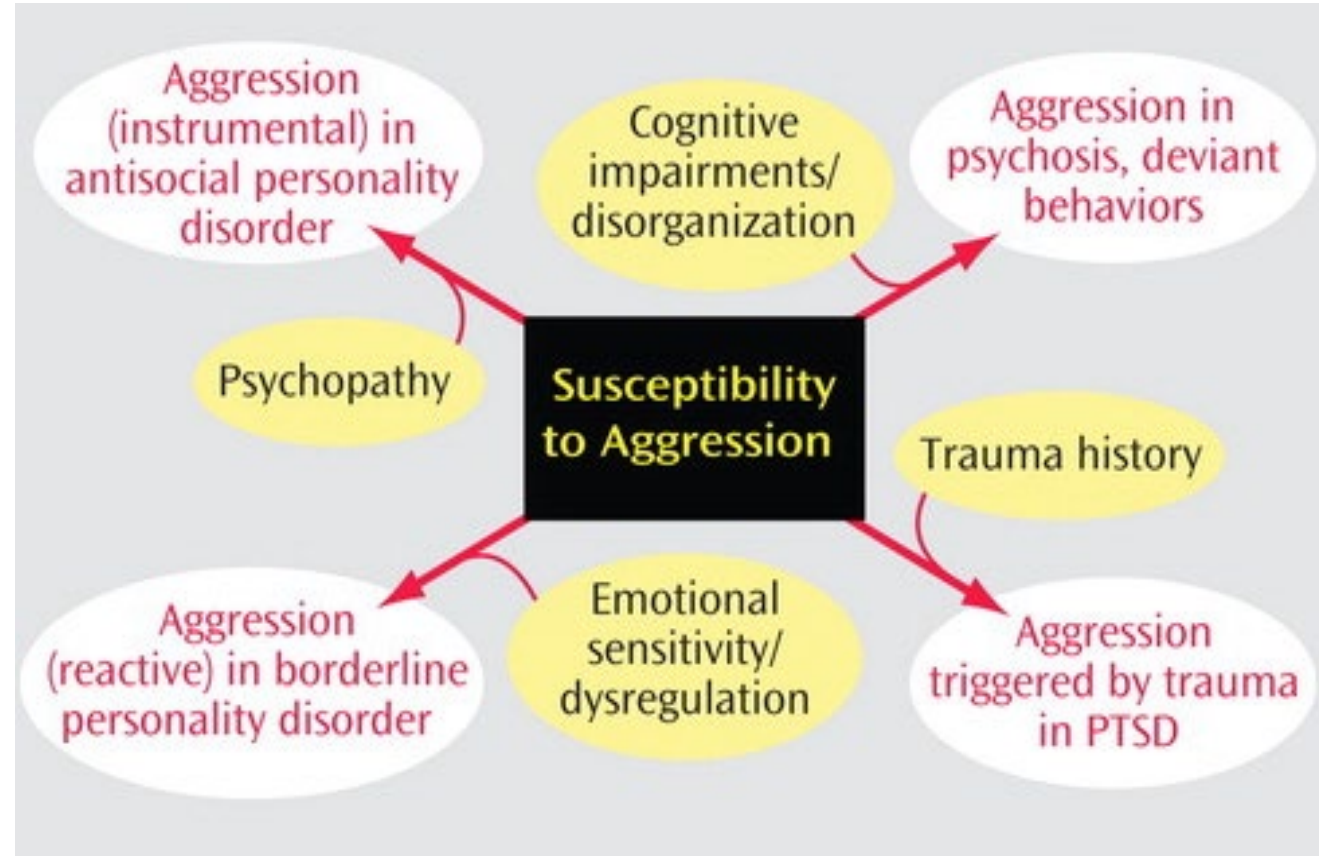
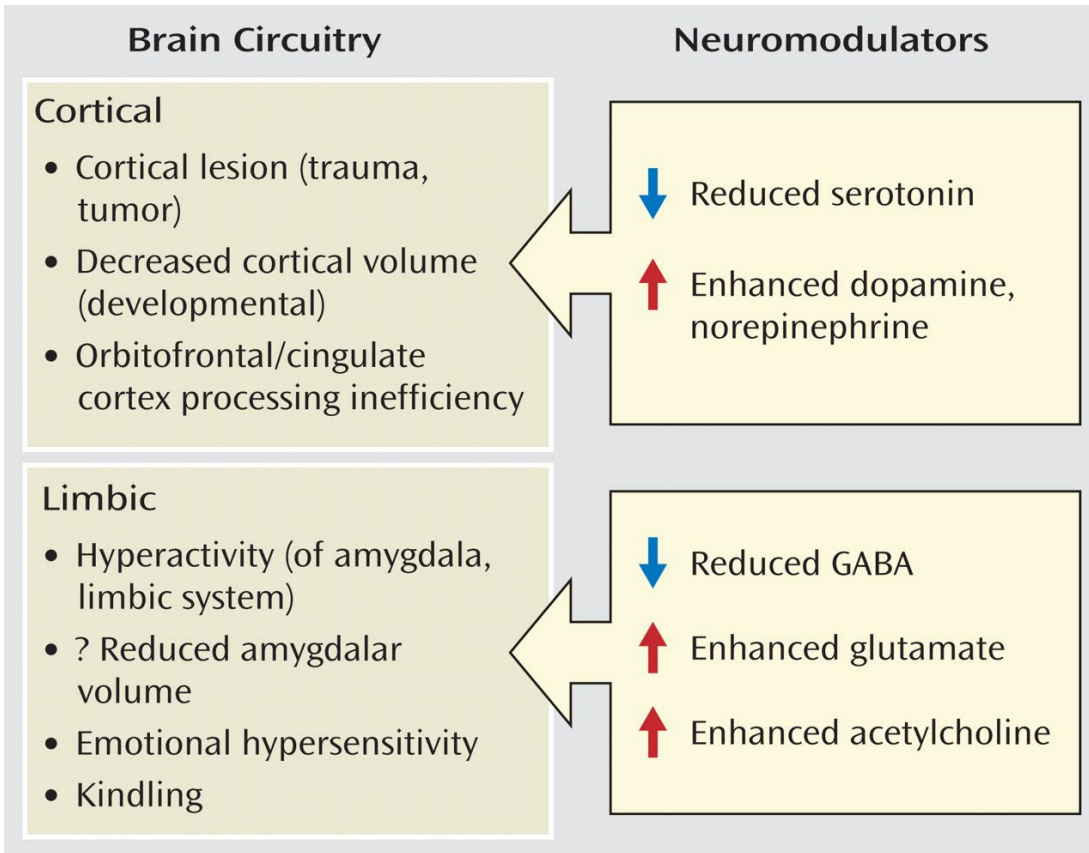
RESPIRATORY
RATE



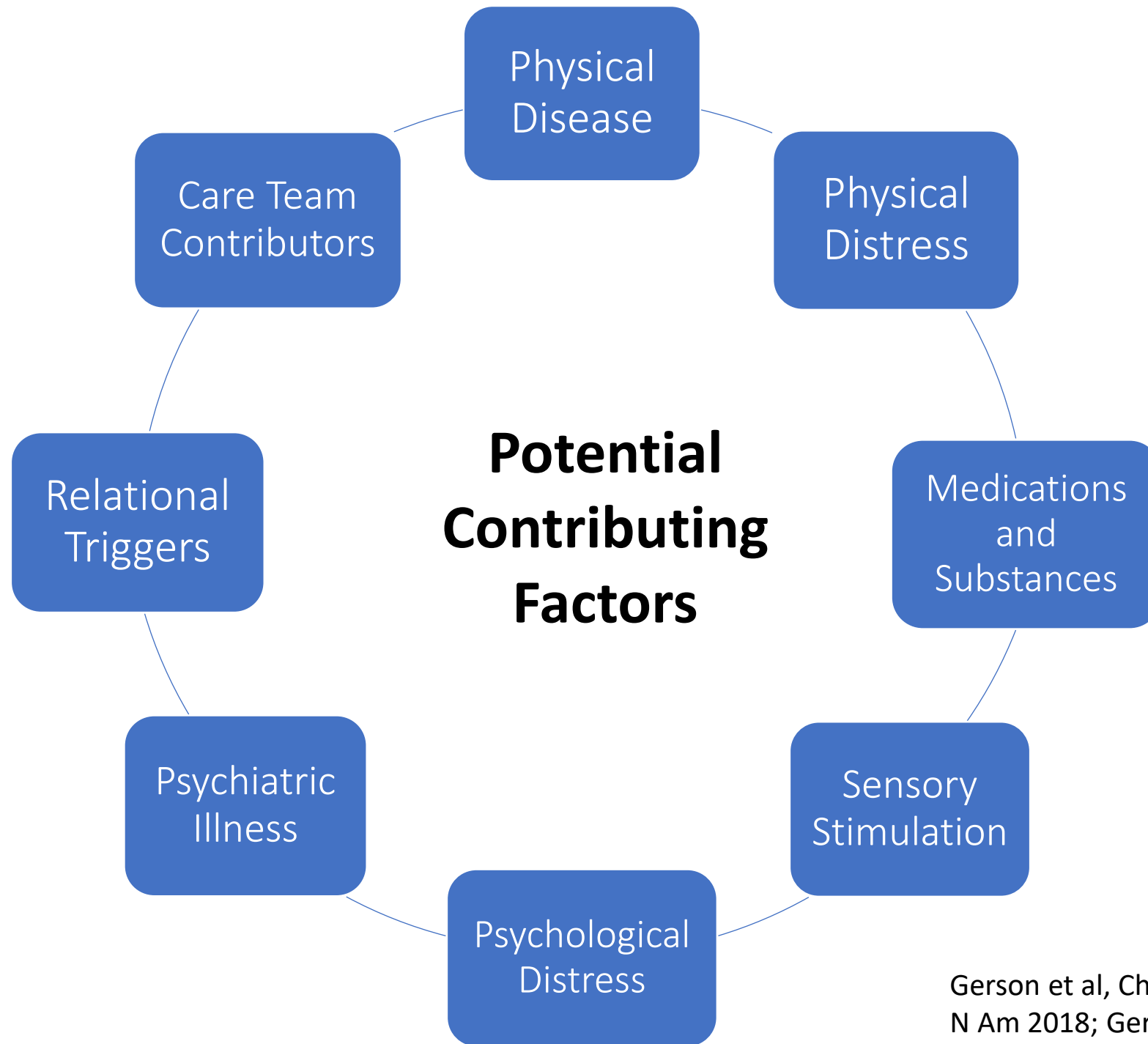
PAIN



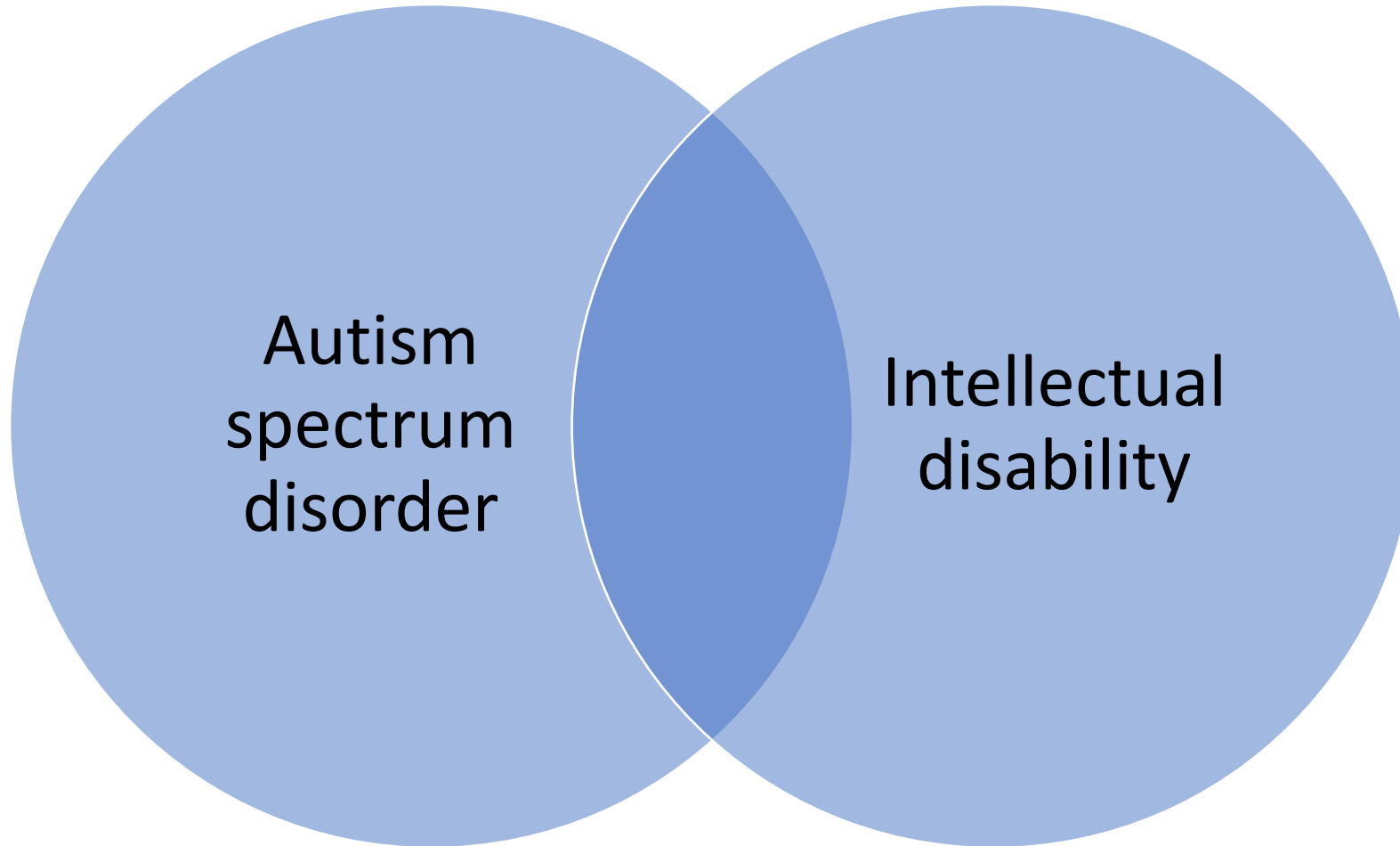
Agitation and Aggression as the 6th vital sign



Pathophysiology



Two DISTINCT diagnostic categories



Agitation in patients with ASD/ID

Factors influencing agitation or aggression

- Real or anticipated experience related to care
- Disruption of routine, schedule, or rule
- Environmental or sensory stimulation
- Sign of pain or physical discomfort
- Difficulty with communication
- Difficulty with an activity of daily living
- Separation from a support or attachment figure

Other Mental Health Considerations

- Low distress tolerance
- Strong emotional expression
- Distorted cognitive patterns
- Maladaptive coping
- Intense anxiety
- Poor impulse control
- Vehicle of communication
- History of maltreatment
- Substance use





Evaluation

Particular attention to:

- Impulsivity
- Cognitive/developmental abilities
- Predominant affect (temperament)
- Triggers and soothing strategies
- Caretaker style and dyadic relationship
- Past traumas
- Past response to interventions

Be mindful of:

- What is the function of the behavior?
- Vitals, physical examination
- Past diagnostic evaluation
- Collaterals
- Value of observation

Managing Agitation and Aggression

Behavioral planning with the goal of reducing stressors, enhancing coping strategies

Support of parent-child interaction

Evidenced-Based Individual Psychotherapy

Developing an interprofessional support team with aligned language, management and escalation strategies

Carefully developed medication regimen

Behavioral Planning

- Characterize behaviors and progression
- Identify differential abilities
- Potential triggers and stressors
- Enhancing comfort strategies
- Minimize transition or unanticipated changes
- Improve communication

Environmental Modification

- Reduce sensory overstimulation
- Promoting positive sensory experiences
- Support sleep-wake regulation
- Create a regular schedule of and building routines
- Provide supports for physical functioning and communication
- Remove potential weapons or factors in the environment

Personal Protective Equipment

Commonly
used:

Cut-resistant Kevlar sleeves and gloves

Forearm pads

Impact cushions

Face masks with splash guards

Hats or hair coverings

Helpful in
unique
circumstances

Helmets with face shields

Chest protector

Bite-pro Bite Resistant Arm Guards

Tear-away scrub tops

Tear-away neck Kevlar

Bilateral rigid elbow cuffs (pedi- or medi-wrap immobilizers)

Protective helmets with or without a face shield

Behavioral Therapy

- Individual Therapy
 - Applied Behavioral Analysis
 - Behavioral Planning
 - Exposure Therapy
 - Cognitive Behavioral Therapy
- Family Therapy
- Trauma-Informed Care
- School Interventions

LIMITED EVIDENCE

JOURNAL OF CHILD AND ADOLESCENT PSYCHOPHARMACOLOGY
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Pp. 505–515
DOI: 10.1089/cap.2010.0128

Original Articles

Experts' Recommendations for Treating Maladaptive Aggression in Youth

Elizabeth Pappadopulos, Ph.D.,^{1,*} Nancy Scotto Rosato, Ph.D.,^{2,†} Christoph U. Correll, M.D.,³
Robert L. Findling, M.D.,⁴ Judith Lucas, Ed.D., A.P.N.,² Stephen Crystal, Ph.D.,² and Peter S. Jensen, M.D.^{5,6}

Review > J Am Acad Child Adolesc Psychiatry. 2003 Feb;42(2):145-61.

doi: 10.1097/00004583-200302000-00008.

Treatment recommendations for the use of antipsychotics for aggressive youth (TRAAY). Part II

Elizabeth Pappadopulos¹, James C Macintyre li, M Lynn Crismon, Robert L Findling,
Richard P Malone, Albert Derivan, Nina Schooler, Lin Sikich, Laurence Greenhill, Sarah B Schur,
Chip J Felton, Harvey Kranzler, David M Rube, Jeffrey Sverd, Molly Finnerty, Scott Ketner,
Sonja E Siennick, Peter S Jensen

Affiliations + expand

PMID: 12544174 DOI: 10.1097/00004583-200302000-00008

ORIGINAL RESEARCH

Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department: Consensus Statement of the American Association for Emergency Psychiatry

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Pharmacologic Management

Guidelines for medication use

- Continue to reassess and reflect upon etiology
- **Use in concert with non-pharmacologic de-escalation strategies**
- **Intent is to calm but not sedate or alter mentation**
- Be aware of past and current responses to treatment
- **Consider half or extra dose of home medication (if responding well)**
- **Avoid polypharmacy**
- **Avoid rapid switching or addition of medications**



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Skills for Behavioral Interventions: Theory & Practice

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Learning Objectives

- Identify aspects of trauma-informed care, including behavioral screening, assessment, and planning
- Practice identifying needs to increase trauma-informed behavior planning at your sites
- Learn behavioral intervention skills for use in daily work

Behavioral Intervention Skills



**SELF-REGULATION
AND PLANNING**



COMMUNICATION



RESPONDING

Self-Regulation

In situations with dysregulated behavior, the first affect to regulate is your own

This is difficult during a crisis!

Strategies to Regulate

Diaphragmatic breathing
5-4-3-2-1
Sensory Check-In

Respond, Don't React

UNDERSTANDING THE BRAIN: HAND BRAIN MODEL, DR. DAN SIEGEL



The Amygdala sends waves to the Hypothalamus (command center) which activates the Autonomic Nervous System:

- Sympathetic (fight, flight, freeze, collapse)
- Parasympathetic (rest & digest)

FIND A CALM MOMENT *with Four Square Breathing*



Find a quiet place where you won't be distracted. Sit upright and get comfortable. Close your eyes.

INHALE through the nose to a count of four. Lungs should be completely full of air.

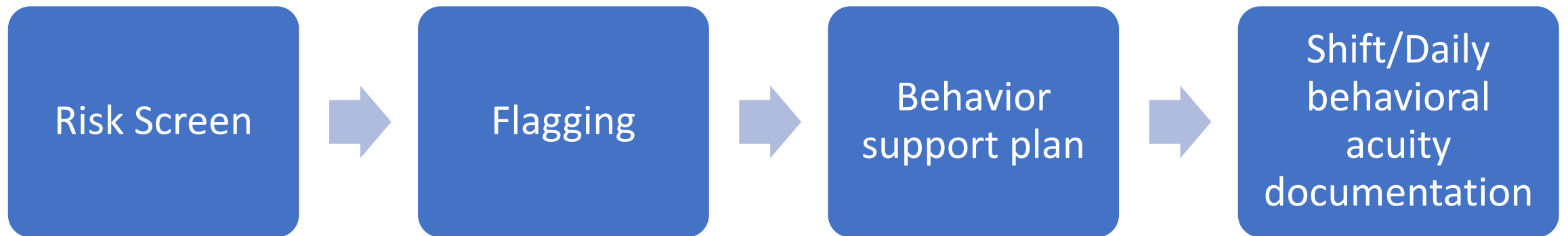
HOLD the air in your lungs for a count of four.

EXHALE through the mouth to a count of four. All of the air should be out of the lungs.

HOLD the lungs in an empty state for a count of four.

Repeat for as long as you're able to, or for as long as you'd like.

Utilizing systems of communication to support individuals



Philosophical Principles of Screening

Trauma-informed Approach

- Clinical approach, behaviors arise for a reason, agitation is a clinical symptom, curiosity and compassion is key, not a security symptom

Keep staff safe and allow patients to have access to medical care

- Increase availability of care for individuals with behavioral dysregulation
- Best practices for staff safety typically align with best practices for providing care

Importance of Screening

Transition from **reactive** systems to **proactive** systems

- Pre-identifying risk: Prevent the crisis before it happens
- Intended to promote adaptability and provide resources
- Focus on adaptive care to better serve children/youth. Ensures health equity & social justice. Behavior is not a barrier to access health care.
- Screening provides data to show amount of risk in health system, which helps reinforce efficacy of proactive interventions

Potential for **unintended consequences**

- **NOT** intended to label or stigmatize individuals

Screening Tool Development: Healthcare settings

Screening vs. Assessment

- **Screening:** identifying behavioral and/or aggressive risk
- **Assessment:** getting information to understand behaviors (frequency, triggers, coping, etc.)

Screening Content

- Validated tool vs. homegrown
- Pick a tool that fits your organization

Ramping up based on maturity of prevention/resourcing

- Start where you can, test small, then ramp up quickly to a sustainable model.
- Connect work to staff safety and healthcare access to get leadership support early
- Get leadership buy-in to fast track work such as resources, EMR builds, and unit participation
- Event reviews can lead to innovation and highlight gaps

Philosophical Principles of Prevention Planning

Risk recognition is best accompanied with the **availability of prevention planning and resources**

- Once risk is identified, assuring quick tools to supporting the individual is of the utmost importance
- There is a risk of increasing anxiety for staff if patient is identified at risk and no tips/tools are created

Prevention plans should be **collaborative and inclusive of family/patient input**

- Building a plan to include patient/family input on soothing/calming techniques is extremely important
- For individuals who come from group homes/long term facilities, getting previous support plans & info from staff at the start of admission helps minimize “playing catch up” if things happen
- This may look like reviewing of 504 plans or IEPs in the school setting.
- This may also look like incorporating new information after inpatient stay or outpatient tx plans.

Importance of Prevention Planning

Provides **mitigation plan** to staff to decrease behavior risk

- Stating patient is aggressive is not enough - give staff interventions to prevent and protect against aggression
- List items that trigger/activate behavior and identify warning signs of behavior escalation
- Ways to soothe person (each person is different, this information from family/caregivers/patient is extremely important)

Increases **clinical skill** at the bedside

- Knowledge is power
- The more we know about the patient's triggers, how they cope, and how they communicate their needs, the better prepared staff are to provide care that decreases behavior risk and increases access to medical care

Prevention Plan Development

Content to Include in Prevention Plans

- How does the patient communicate?
- What triggers behavior and what are behaviors that indicate patient may be escalating?
- What can staff do to support?
- In-room safety measures and behavioral PPE

Prevention Plan Logistics

- When is the prevention plan created?
- Who needs to receive the prevention plan?
- How often is the prevention plan revisited and shared thereafter?

Philosophy Principles of documentation

Seeing behavior as the 6th vital sign

- Often, we see behavior as an artifact of just hospitalization
- Highlighting behavior as important as vital signs highlights the need for all care takers to be skilled in assessing and intervening

Importance Principles of Communication to all Members of the Team (including the family)

Once a patient is at risk, discreet shift documentation to show acuity is imperative

- Utilizing severity-based approaches to behavior from a day/week/month perspective.
- IE quiet, calm, irritable, verbally aggressive, aggressive to objects, aggressive to self/others

Utilizing this data to trend acuity is important

- Behavioral documentation is one piece...
- Was patient in restraints last 24 hours?
- How many PRNs were utilized?
- Are they requiring bedside support (patient attendant, specialized behavioral health support etc)
- In school settings: communication with counselors/team leaders/special educators when do you meet to update IEP/504 plans outside of the yearly model? How do you come together with the family

Key Take-Aways

- Standardizing screening is important but half of the equation. Without having a prevention plan in place immediately as you identify risk can cause anxiety to end users.
- Behavior support plans should be a living document that is updated often throughout the “lifespan” of an individual under our care.
- These plans should be easy enough for anyone to both understand and input items into.
- Having a way to flag a charts and remove flag is very important, in hospital or ambulatory settings.
- Be mindful of language, labeling, and bias for individuals at risk for behavioral dysregulation is high.
- Shift based documentation can lead to a path of building acuity monitoring systems.

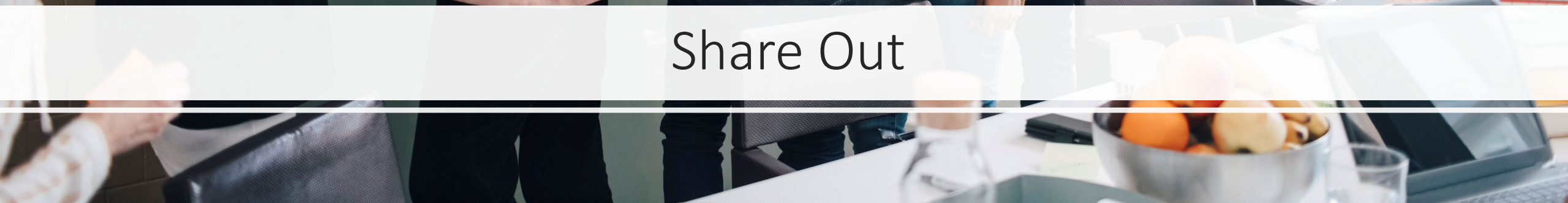
Practice

In small groups:

1. Identify ways the system you work in puts these concepts into practice well
2. Identify gaps that could be addressed and needs you see in implementing these strategies
3. Reflect on what you need from others in your community to move toward this frame
4. Share out



Share Out



Behavioral Intervention Skills



**SELF-REGULATION
AND PLANNING**



COMMUNICATION



RESPONDING

Communication

Rely on Relationship and Connection Whenever Possible

You may call on a colleague who has established a positive relationships with the child in the past

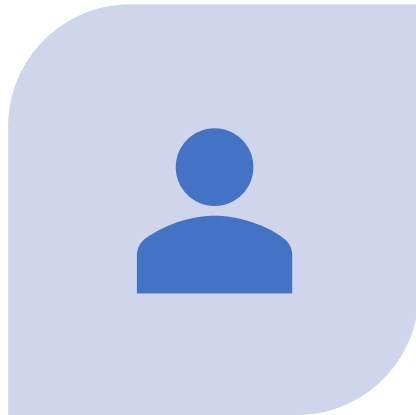
Attend to Nonverbals and Emotions

Note sensory comfort
Reduce over-stimulation
Feelings = okay,
Behavior has Limits

Whenever Possible, Offer Choices

Open-Ended Questions
Find and Name Places of Agreement
Active Listening

Behavioral Intervention Skills



**SELF-REGULATION
AND PLANNING**



COMMUNICATION



RESPONDING

Responding (Not Reacting)

Re-direction/Distraction

Relying on known preferred activities
Individualized plans for calming/coping strategies

Follow Through

Balance Strong/In Charge with Warm/Kind
Say what you mean
Avoid lying

Specific Skills

Mindfulness
DBT Skills
Sensory

STOP SKILLS

S



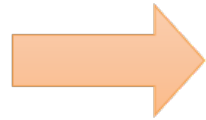
STOP
try not
to react

T



TAKE
a break,
breathe

O



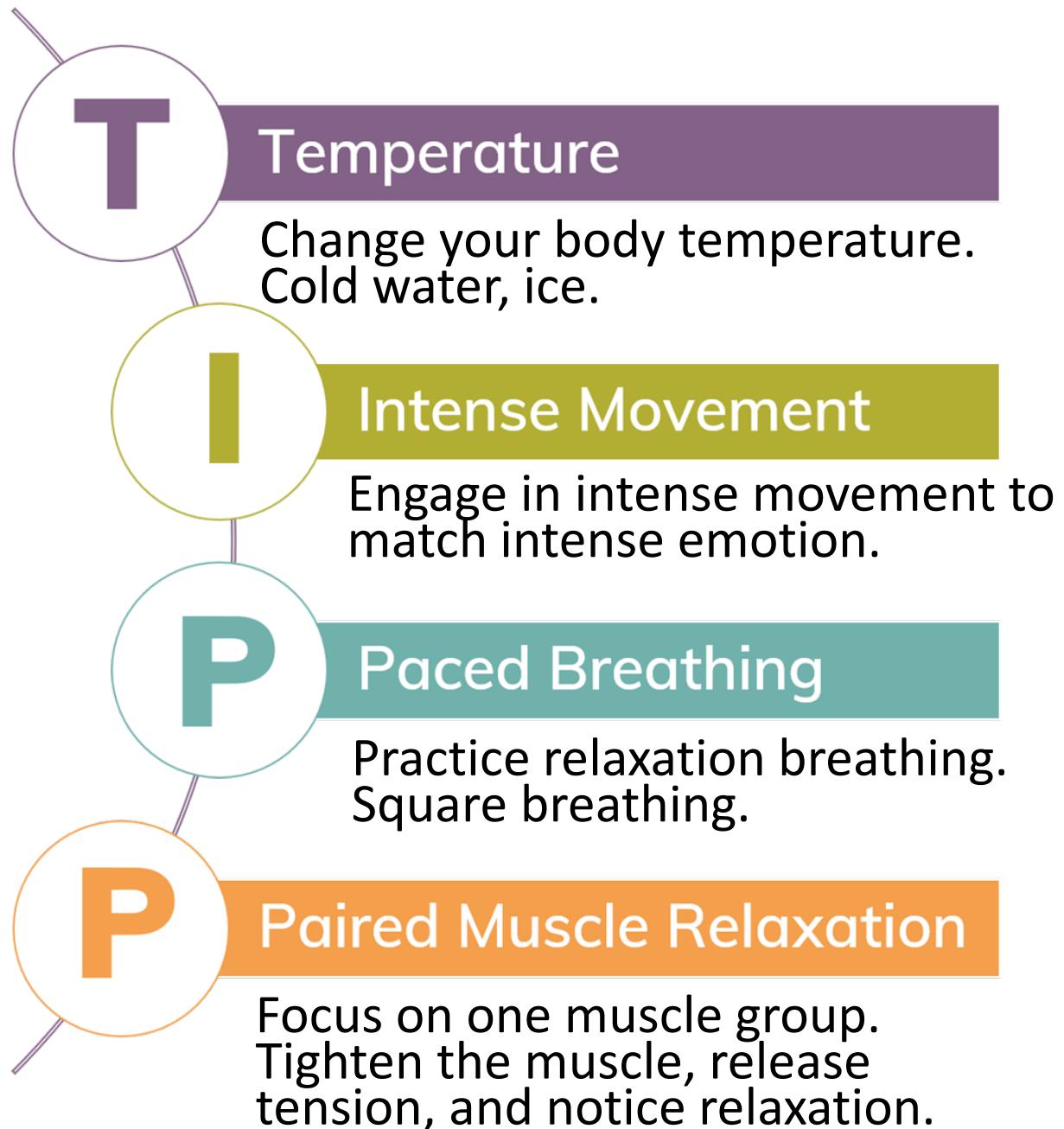
OBSERVE
emotion
thought
needs

P



PROCEED
in
wisemind

TIPP SKILLS



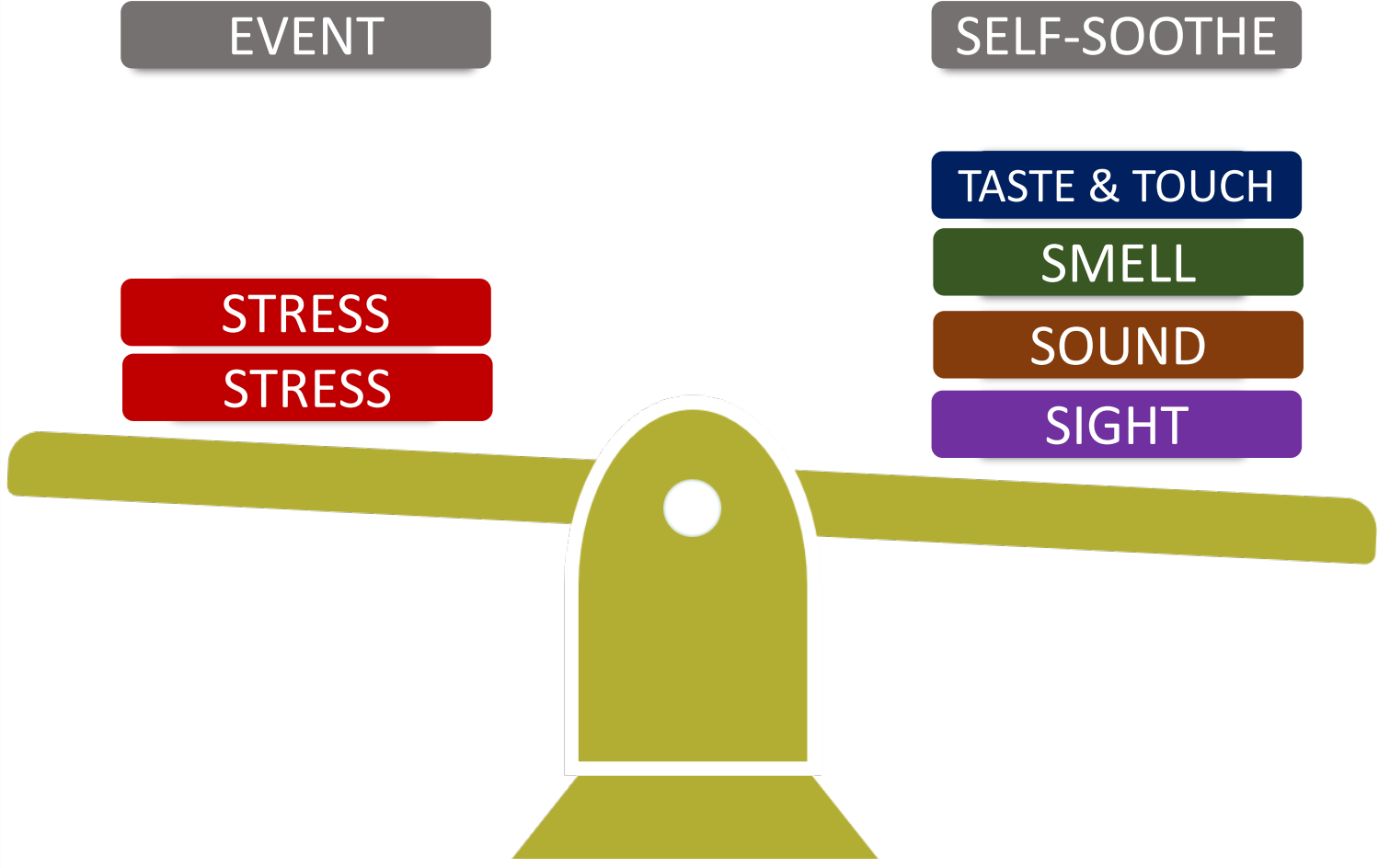
SELF-SOOTHING SKILLS TO REDUCE STRESS



SELF-SOOTHING PRACTICE

STEPS:

- PROMPTING EVENT:
Rate Stress 1-5
- PRACTICE SELF-SOOTHING:
Rate Stress 1-5
- ANY CHANGE?
If no, keep going until stress comes down even slightly.



REPAIR THE DISRUPTION

When we feel disconnected...

I can take action to make it better,

I can repair what was disrupted,

I can help my child restore his or her balance.

This strengthens the roots

And helps my child trust that I can be

A secure base and safe haven.

Practice





Guiding Principles and Practices: Caring for Youth Exhibiting Aggressive Behavior: Use of Psychopharmacology

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Pharmacologic Management

Medication factors:

- Formulations available
- Onset of effect
- Duration of effect
- Metabolism
- Drug:drug interactions
- Potential side effects

Patient factors:

- Etiology of agitation
- Severity of presentation
- Age
- Body habitus
- Nutritional status
- Hepatic and renal function
- Prior medication experiences

INDICATIONS FOR USE OF PHARMACOLOGIC MANAGEMENT

Severity or
impairment related
to behavior

Sleep disturbance

Emotional or
behavioral
dysregulation

Impulse Control

Worsening
Underlying
Pathology

When behaviors
persist despite
optimized non-
pharmacologic
intervention

OPERATIONALIZING SYMPTOM TARGETS

Antipsychotics:
emotional/
behavioral
dysregulation,
aggression

Alpha agonists:
anxiety, acute
stress, insomnia,
impulsivity

Trazodone:
insomnia,
agitation

Melatonin:
insomnia

Mood stabilizers:
Agitation, mood
lability

Benzodiazepines:
Agitation, severe
anxiety, catatonia

SSRIs: Anxiety,
Depression,
Repetitive
Behaviors, OCD

Other agents used
for severe
repetitive
behaviors/self
injury

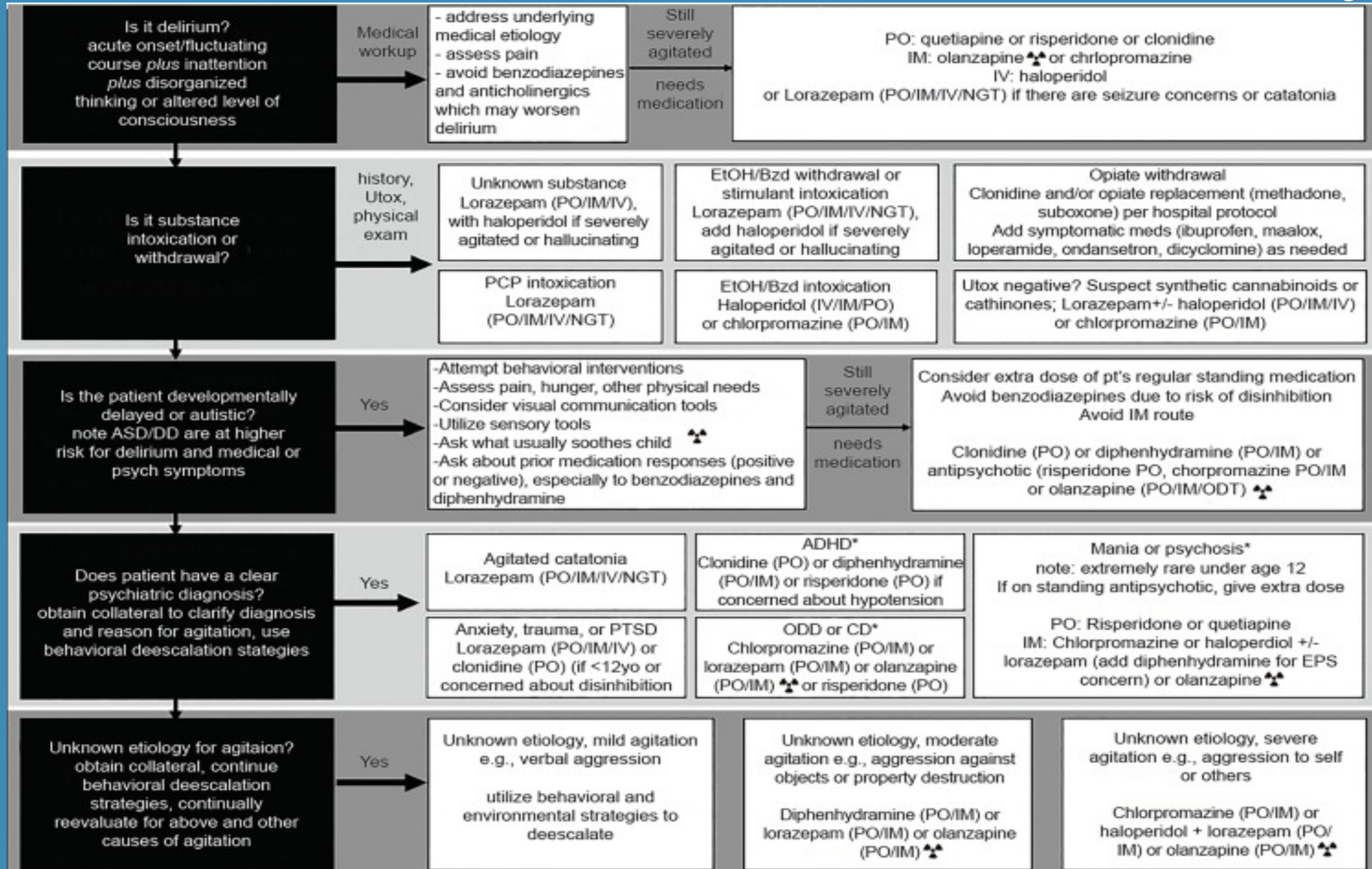
SIDE EFFECTS TO CONSIDER

- Antipsychotics: extrapyramidal symptoms, QT prolongation, hypotension, dyslipidemia, weight gain, sedation, elevated transaminases (rare), BM suppression (rare)
- Alpha-2 Agonists: hypotension, bradycardia, rebound HTN/tachycardia, sedation
- Trazodone: sedation, priapism (rare)
- Mood Stabilizers: various depending on agent, many require levels
- Benzodiazepines: disinhibition, paradoxical effect, sedation, hypotension, bradycardia
- SSRIs: headaches, GI upset, tremors, diaphoresis

Medication	Dose	Peak Effect	Max Daily Dose	Notes/Monitoring
Clonidine (alpha2 agonist)	PO: 0.05mg-0.1mg	PO: 30-60 min	27-40.5kg: 0.2mg/day 40.5-45kg: 0.3mg/day >45 kg: 0.4mg/day	-Monitor for hypotension and bradycardia. -Avoid giving with BZD or atypicals due to hypotension risk.
Diphenhydramine (antihistamine)	PO/IM: 12.5-50mg 1mg/kg/dose	PO: 2 hrs	Child: 50-100mg Teen: 100-200mg	-Avoid in delirium. -Giv with haloperidol or chlorpromazine for EPS. -Can cause disinhibition or delirium in younger or DD youth.
Lorazepam (BZD)	PO/IM/IV/NG T: 0.5mg-2mg 0.05mg-0.1mg/kg/dose	IV: 10m PO/IM: 1-2h	Child: 4mg Teen: 6-8mg Depending on weight/prior med exposure	-Can cause disinhibition or delirium in younger or DD youth. -Can be given with haloperidol, chlorpromazine or risperidone. -Do not give with olanzapine (resp. suppression)
Chlorpromazine (neuroleptic)	PO/IM: 12.5-60mg (IM=half PO dose) 0.55mg/kg/dose	PO: 30m IM: 15m	Child <5 yo: 40mg/day Child >5 yo: 75mg/day	-Monitor for hypotension.

Medication	Dose	Peak Effect	Max Daily Dose	Notes/Monitoring
Haloperidol (neuroleptic)	PO/IM: 0.5mg-5mg (IM is half dose of PO) 0.55mg/kg/dose	PO: 30m IM: 15m	15-40kg: 6mg >40kg: 15mg Depending on antipsychotic exposure	<ul style="list-style-type: none"> -Monitor for hypotension. -Consider EKG or cardiac monitoring for QT prolongation. -Note EPS risk with MDD>3mg/day, with IV dosing having very high EPS risk -Consider AIMS testing
Olanzapine (neuroleptic)	PO/ODT or IM: 2.5-10mg	PO: 4-8h IM: 15-45m	10-20 mg Depending on prior antipsychotic exposure	-Do not give with or within 1h of any BZD given risk for resp. suppression
Risperidone (neuroleptic)	PO/ODT: 0.25-1mg 0.005-0.01mg/kg/dose	PO: <1 hour	Child: 1-2mg Teen: 2-3mg Depending on antipsychotic exposure	-Can cause akathisia (restlessness/agitation) in higher doses
Quetiapine (neuroleptic)	PO: 25-50mg 1-1.5mg/kg/dose (or divided)	PO: 30m	>10 yo: 600mg Depending on prior antipsychotic exposure	<ul style="list-style-type: none"> -More sedating at lower doses -Monitor for hypotension

Clinical Decision Flow-Chart Based on Clinical Considerations and Potential Etiologies



Key Takeaways

- Conceptualize aggression as a "6th vital sign"
- Multifactorial with predisposing and precipitating factors
- Management conducted in an interprofessional fashion, guided by etiology, with behavioral planning, environmental modification, enhance adaptive coping, increased support for comfort, while avoiding potential triggers for agitation
- Pharmacologic management etiologically-driven, considering individual, physical health and medication factors
 - Goal: calm the patient and address underlying factors contributing to agitation or aggression to allow for ongoing assessment as well as to mitigate any iatrogenic harm

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