CHILD AND ADOLESCENT PSYCHIATRIC EMERGENCIES

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Suggested citation: Fader RP, Mroczkowski MM. Child and adolescent psychiatric emergencies. In Rey JM & Martin A (eds), *JM Rey's IACAPAP e-Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions 2020. Psychiatric complaints in youth are an increasingly common reason for emergency department (ED) care (Kalb, 2019). Mood and anxiety disorders, psychosis, behavior problems, and substance use all carry significant risk of impairment and often emerge during childhood and adolescence. Additionally, these conditions are often complicated by suicidality, aggression, and risky impulsive behavior that require containment and de-escalation. Psychiatric emergency assessments are crucial to safely and effectively evaluating, diagnosing, and treating these disorders (Kalb, 2019; Merikangas, 2009). This chapter aims to outline an standardized, efficient way of evaluating and managing psychiatric emergencies in children and adolescents.

GENERAL PRINCIPLES

Safety plays a crucial role in psychiatric evaluation in youth. The ED setting often affords clinicians more resources to help manage psychiatric crises. Use of quiet or seclusion rooms, continuous observation, medication for agitation, and physical restraint are at times necessary to contain patients who pose an imminent risk to themselves or others. Interventions like these should be used sparingly and only when clinically appropriate as they come with their own risks (e.g., adverse drug effects, injury, emotional trauma, etc.). These interventions, though vital at times for the physical safety of the patient or others, can also decrease the patient's and the family's sense of emotional safety. Working with emergency medicine treatment providers to find private, quiet spaces will allow patients and their families to feel more at ease with the assessment and may facilitate disclosure of psychiatric symptoms or precipitating conflicts. In instances where private spaces are not available, or the patient's behavior poses too great a risk to assess alone, taking time at the beginning of the evaluation to inquire about ways to address patients' comfort (e.g., food or drink, chairs, having caregivers nearby) can also mitigate patients' reticence. Simple measures to address both physical and emotional safety may obviate the need for more restrictive measures later in the evaluation and treatment process.

When psychiatric emergencies occur outside the emergency department, assessing youth with psychiatric complaints can be more complicated. As in the ED, safety of patient and staff should take priority. Techniques for maximizing safety outside of the ED setting include decreasing ambient stimulation (e.g., lights, noise, other people, etc.), removing dangerous objects (including sharps and hard/heavy objects), and maintaining continuous observation of the young person from at least two arm's length away. Providers should introduce themselves slowly and explain their role to the patient with simple language and a calm, nonjudgmental tone. As in the ED, asking about and addressing patient comfort may help to both de-escalate the behavior and increase rapport. The goal, if there are concerns about the child's safety due to psychiatric symptoms, should be to calm the young person enough for transport to the nearest emergency department for evaluation, if possible.

Obtaining *collateral information* is a mandatory component of every evaluation. Children who are struggling are often unable to independently reach out for help. Additionally, they may not always be at a developmental level that allows them to answer certain clinical questions. As such, caregivers' reports are

Goals of Evaluation

- Determine if the patient is at imminent risk of harm to self or others
- · Clarify the psychiatric diagnoses (if any) that contributed to the presenting complaint
- Identify the biological, social, and psychological factors that contributed to the presenting complaint
- Establish the patient's level of functioning at baseline and changes from that baseline
- Identify the strengths, supports, and protective factors that may alleviate distress and mitigate risk of harm to self or others
- Clarify the problems and goals for treatment
- Determine the most appropriate level of care for treatment

crucial, particularly in emergencies. In addition to the psychiatric history, caregivers will need to clarify who is responsible for medicolegal decision making for the child, especially if consent for medication or inpatient hospitalization is required. Caregivers can also identify other current care providers, school placement, and if there is past or current involvement of child protection services. If caregivers are not available, school staff and/or social services personnel may be able to provide collateral information helpful for clinical evaluation.

Psychiatric assessment of children and teenagers also requires an understanding of cognitive, emotional, and physical development. Although development tends to follow a general trajectory, each child's development is unique and may or may not match closely their chronological age or physical appearance. Tailoring the interview and assessment to the child's developmental level will help providers build rapport with the patient and elicit clinical information that is both accurate and helpful. A general rule of thumb is that younger school age children require more direct questions, may need to use major life events (e.g., birthdays, holidays, school starting or ending) as anchors to help construct timelines, and may have little or no understanding of topics like death, trauma, or sex (Margaret & Hilt, 2018). Adolescents, conversely, may respond better to openended or exploratory questions, may be able to independently describe psychiatric symptoms and construct timelines, and may withhold information about their experiences with death, trauma, sex, or substance use due to feelings of shame or fear of punishment (Margaret & Hilt, 2018). Clinicians should adjust their interview technique based on cues from the patient to foster rapport and to elicit necessary clinical information.

Telepsychiatry

Telemedicine is a rapidly evolving field, particularly in the aftermath of the COVID-19 pandemic. Telecommunication technology allows physicians to provide clinical care across vast distances to those with limited access to medical resources. Given the relative lack of reliance on complicated testing equipment, psychiatry has flourished in this new clinical modality. Telepsychiatry allows patients to receive expert psychiatric consultation that would otherwise be inaccessible. The benefits of telepsychiatry, however, also come with significant questions of safety, privacy, and system compatibility. Each of these are addressed through a combination of standards of practice, healthcare system protocols, and legal requirements (Deslich,



Click on the picture to access "Child and Youth Emergency Mental Health Care: A National Problem" by JL Cooper and R Masi. The National Center for Children in Poverty (2007) 2013). Providers interested in establishing a telepsychiatry practice should become familiar with the rules and regulations specific to their jurisdiction.

For emergency psychiatric care, many of the same safety tenets that apply generally also apply to telepsychiatry. Telepsychiatry providers should ensure that the patient and family are with care providers who can manage agitation or harm to self or others should it occur during the evaluation. There should be clear lines of communication between the telepsychiatry provider and the care providers who are with the patient and family to determine when these interventions are necessary. Providers should obtain formal consent for telepsychiatry assessment from the patient and/or family. Performing a psychiatric assessment across telecommunication devices can also affect the rapport-building process.

A variety of equipment and communication systems are used to facilitate telemedicine encounters and each of these come with costs, logistic requirements, and privacy concerns (Deslich et al, 2013).

Psychiatric versus Social Emergency

Clinicians must determine whether the presenting crisis is broadly of a psychiatric nature or would be best characterized as a social emergency. Typically, psychiatric emergencies in which patients are an acute risk to themselves or others are best served by admission to an inpatient unit. Social emergencies may be best addressed using community-based services such as home-based crisis intervention, family therapy, or individual therapy. However, many cases have features of both: patients presenting with "social" emergencies may also necessitate inpatient psychiatric admission for diagnostic clarification and patient or family safety. Furthermore, social emergencies usually are psychosocial stressors themselves and may exacerbate underlying psychiatric illness. Some examples of psychiatric and social emergencies are listed in table J.1.1.



Click on the picture to watch a video clip explaining what parents, children and mental health providers should expect when a child is transported to the emergency room for a mental health evaluation (8:45)

Psychiatric EmergenciesSocial Emergencies• Suicidal ideation, planning, attempts• Parent/child relationship issues• Homicidal ideation• Homelessness• Acute psychosis• Death of family or friend• Mania• Military deployment of parent• Depression• Divorce of separation of parent/caretaker• Agitation/aggression• Immigration status concerns• Food insecurity• Disciplinary crisis					
 Homicidal ideation Acute psychosis Mania Depression Anxiety Agitation/aggression Homelessness Death of family or friend Military deployment of parent Divorce of separation of parent/ caretaker Immigration status concerns Food insecurity 	Psychiatric Emergencies	Social Emergencies			
	 Homicidal ideation Acute psychosis Mania Depression Anxiety 	 Homelessness Death of family or friend Military deployment of parent Divorce of separation of parent/ caretaker Immigration status concerns Food insecurity 			

Table J.1.1. Examples of psychiatric and social emergencies

MEDICAL ASSESSMENT OF EMERGENCY PRESENTATIONS

Hickam's dictum says that "patients can have as many diseases as they darn well please." Although it is meant to be humorous, this adage carries considerable clinical and ethical weight when assessing patients with psychiatric emergencies. According to the 2001-2003 National Comorbidity Survey Replication, almost two-thirds of people in the US with a psychiatric disorder have at least one nonpsychiatric medical condition (Alegria et al, 2016). Those who engage in destructive behavior (i.e., suicide attempts, self-injury, and violence) as part of a psychiatric decompensation can sometimes have serious medical sequelae. Furthermore, some medical conditions can present with psychiatric signs and symptoms (i.e., delirium, intoxication, traumatic brain injury). Addressing both the psychiatric and medical components of a patient's presentation to the ED is necessary for good quality patient care.

The standard medical work-up should begin with a history of the presenting illness (including a thorough review of systems), vital signs assessment, and physical examination. Underlying medical complaints uncovered in these initial stages should inform laboratory and imaging studies. Laboratory tests may include a metabolic panel (to assess electrolytes, glucose level, kidney function, and liver function), blood count (to assess for cytopenias and infection), urinalysis and urine toxicology screen (to assess for infection and intoxication). If there are concerns about head trauma or an intracranial mass, imaging may be warranted. In children and adolescents, magnetic resonance imaging should be used whenever possible over computed tomography to minimize radiation exposure. Further assessment, work-up, and treatment should be specific to the patient's presentation (see table J.1.2).

COMMON PRESENTING PROBLEMS

Clinicians must determine whether patients in crisis require inpatient admission or whether resources in the community would best address the presenting complaints. We describe below common presenting problems and key questions to consider during the evaluation. Further assessment, diagnostic, and management issues are presented for each presenting problem.

Investigations	Purpose
• Vital signs and physical examination	Screen for medical stability
Metabolic panel	Assess for electrolyte/glucose derangements and renal dysfunction
Liver function tests	Assess for hepatic dysfunction and protein deficiency
Complete blood count	Assess for cytopenias and infection
Urinalysis	Assess for infection
Urine toxicology	Assess for certain types of substance use
 Magnetic resonance imaging or computed tomography 	 Assess for traumatic brain injury and intracranial mass (to be avoided unless high suspicion for positive findings)

Suicidal Ideation, Planning, and Attempts

Key Questions

- Are you having thoughts of wanting to kill yourself?
- Do you have a plan as to how you would kill yourself?
- Have you taken steps or made preparations to carry out this plan?
- Have you tried to kill yourself before? If so, when and how?
- Is there anything/anyone who would keep you from acting on these thoughts?

Suicide Risk Assessment

Issues about suicidal behavior are described in detail in chapter E.4 of the eTextbook. Given the risk of suicide in youth, a comprehensive suicide risk assessment is necessary to categorize the patient's risk and recommend the appropriate level of care. There are many suicide screening instruments utilized for this purpose including the Columbia Suicide Severity Rating Scale (C-SSRS), SAFE-TP, and the ASQ Suicide Screening Questions. Bear in mind that the predictive value of any of these aids is low and that preventing suicide in practice is very difficult.

The Emergency Department Screen for Teens at Risk for Suicide (ED-STARS) is a multi-site study to identify latent class profiles of adolescents with elevated suicide risk and to study the association between these profiles and mental health service utilization (King, 2019). This study found five profiles of elevated suicide risk with differing patterns of eight risk factors. Risk factors included:

- History of multiple suicide attempts
- Suicidal ideation during the previous month
- Depression
- Alcohol or drug use
- Impulsive or aggressive behaviors, and
- Physical or sexual abuse.

Adolescents with previous, but not recent suicidal thoughts, and those from racial and ethnic minorities were least likely to utilize mental health treatment (King, 2019).

Elements of the Brown-Stanley Safety Plan

- Warning signs (mood, behavior, thoughts, images, situation) suggesting that a crisis may be developing
- Internal coping strategies things I can do to take my mind off my problems without contacting another person (relaxation techniques, physical activity, etc.)
- People and social settings that provide distraction
- People whom I can ask for help
- Professionals or agencies I can contact during a crisis (e.g., Lifeline)
- Making the environment safe.

Safety Planning

The estimated level of risk of patients who present with suicidal ideation is key to determine the correct level of care. Patients believed to be at the highest risk typically require inpatient admission. Clinicians have often used the strategy of "contracting for safety" as a verbal or written record of a patient's commitment to staying safe, although its effectiveness is unclear. Brown and Stanley expanded upon, and sought to make this contract more practical and evidence-based—the *safety plan*. The safety plan is a document whereby clinician and patient discuss warning signs, internal coping strategies, people and social settings that provide distraction, people the patient can ask for help, professionals and agencies the patient can contact during a crisis, and steps to make the home environment safer (Stanley & Brown, 2012). Safety plans are recommended for every patient who has suicidal ideation and is discharged with outpatient mental health treatment. A template is available here.

Self-Injury

Key Questions

- Have you ever tried to hurt or harm yourself?
- If yes, how many times?
- What did you do to hurt yourself?
- What were your thoughts when you were hurting yourself?
- Was there any part of you that wanted to die or kill yourself when hurting yourself?



Kathe Kollwitz: *Woman with Dead Child*, 1903. Private collection Self-inflicted injury is a common presentation in pediatric EDs. Selfinjury can range from deliberate self-harm with suicidal intent to involuntary or stereotypic behavior, the latter is often observed in the developmentally disabled. The most common forms of deliberate self-harm are cutting and burning, and patients may use these behaviors as a way to cope with distressing emotions or to punish themselves. Stereotypic behaviors may include hitting, biting, headbanging or scratching, and patients may use these behaviors to self-soothe, manipulate the environment, or express emotional distress.

The priority for treatment when patients present with self-injury is to assess, clean, suture, and dress the wound. Providers should obtain the patient's history of tetanus vaccination. If bite wounds are severe, prophylactic antibiotics may be necessary. Once the wounds have been properly treated, providers should explore the context of the self-injury with the patient and family, with particular attention to the possibility of suicidal intent. Those who pose an imminent risk of harm to self may require extended observation or inpatient admission. Those considered safe to be discharged should complete a safety plan (see above) with the family present prior to discharge. The patient and family should also be educated on *home sanitation*, the process of examination (and removal) of objects that could be used for self-harm within the home environment.



Out-of-Control/Aggressive Behaviors

Key Questions

- What are the presenting behaviors?
- What are the triggers for these behaviors?
- How long has this been going on?
- Have other people or objects been harmed?
- Do the parents/caregivers feel safe at home with the patient?

A 14 year old female was brought to the ED for crisis assessment. She presented with superficial cuttings on her arms (about 50 cuts) and had been cutting herself for one year. She had told her parents about the cutting one month earlier. She typically cut herself when her mood was low. She denied wanting to die. However, she persisted with cutting herself. She reported intrusive thoughts of suicide with a recent increase in frequency and intensity and was being bullied at school. Despite these symptoms, her functioning was not impaired; she was insightful for her age and stated she cut herself to relieve tension and to ward off feelings of loneliness. She described "dips" in her mood triggered by stressful situations and did not sleep well. Family history was significant for depression. She denied substance or alcohol use and showed no signs of intoxication. She had a good relationship with her parents, who described her as a "good kid."

She was assessed as suffering from deliberate self-harm and possibly a major depression. Suicide risk was assessed as low and discharged home with a referral to outpatient mental health services. She returned to the ED six days later dissclosing feeling suicidal, exhausted and wanting to "give up." She denied having a plan. Eventually she revealed that a good friend had died of suicide the day before. The patient was subsequently admitted voluntarily to the adolescent inpatient psychiatric unit due to high suicide risk Carandang et al (2012).

A myriad of causes may underlie aggressive outbursts; their characterization can help clinicians determine the best management. Common examples include parent/child conflict, substance use, mania or psychosis, and underlying medical illness. Table J.1.3 outlines consensus guidelines for both the non-pharmacologic and pharmacologic treatment of agitation based on etiology.

ETIOLOGY	NON-PHARMACOLOGIC INTERVENTIONS	MEDICATION	
Delirium	 Keep staff consistent Family by bedside to help orientation Clocks, calendars to orient Open window coverings in daytime Cluster care to minimize sleep disturbance 	 PO: quetiapine, risperidone, or clonidine IM: olanzapine or chlorpromazine IV: haloperidol or lorazepam 	
Substance intoxication or withdrawal	 Offer food and/or beverages. Ask parent/family to either stay or leave room, depending on current relationship. 	 Unknown substance: lorazepam +/- haloperidol Urine toxicology negative (suspect synthetic cannabinoids or cathinones): lorazepam +/- haloperidol or chlorpromazine PCP intoxication: lorazepam Alcohol/benzodiazepine withdrawal or stimulant intoxication: lorazepam +/- haloperidol Opiate withdrawal: Clonidine or opiate replacement (buprenorphine or methadone) Add symptomatic treatment 	
Developmental disability or autism spectrum disorder	 Tablet computer Fidget and sensory tools Weighted blankets Noise-cancelling headphones Storyboard about the ED visits Offer food and/or beverages. 	 Extra dose of current medication PO: clonidine PO/IM: diphenhydramine PO/IM: antipsychotic (risperidone, chlorpromazine, olanzapine) 	
Clear underlying psychiatric diagnosis	 Ask parent/family to either stay or leave room, depending on current relationship. 	• Specific treatment of the psychiatric condition	
Unknown etiology	 Offer food and/or beverages. Ask parent/family to either stay or leave room, depending on current relationship. Behavioral and environmental strategies to deescalate 	 Moderate: diphenhydramine or lorazepam or olanzapine Severe: chlorpromazine or haloperidol + lorazepam or olanzapine 	

Table J.1.3. Management	of Adolescent Agitation	in the Emergency Department*

PO: oral; IM: intramuscular; IV: intravenous

*Adapted from Gerson et al, 2019.

Delusional/Psychotic

Key Questions
What are the presenting symptoms?
How long have these symptoms been present?
Is there a family history of psychosis?
• Is the patient experiencing command auditory hallucinations? If so, what are the
hallucinations commanding the patient to do?
Has the patient acted on these commands?
What is the patient's current level of functioning?

A systematic review showed that psychotic symptoms are relatively common in young people (median 17% among 9 to 12-year-olds and 7.5% in 13- to 18-year-olds) (Kelleher et al, 2012). If these symptoms persist, impair functioning, or lead to acute risks to the patient or others, the young person may present to the pediatric ED. Proper screening and work-up of psychosis in children and adolescents is of paramount importance for diagnostic clarification, safety, and timely treatment.

First-Episode Psychosis

Work up of a first-episode psychosis should begin with a physical exam with focus on neurological examination, vital signs, weight, height, body mass index (BMI), and waist circumference (see table J.1.4).

Commonly Used Psychosis Rating Scales			
Brief Psychiatric Rating Scale (BPRS) (Overall, 1962)	 Based on the clinician's interview with the patient and observations of the patient's behavior over the previous 2-3 days 		
Positive and Negative Syndrome Scale (PANSS) (Kay et al, 1987)	 Requires a 45-minute clinical interview during which the patient is rated from 1 to 7 on 30 different symptoms based on the interview as well as on reports of family members and other informants. It has three subscales: positive, negative, and general psychopathology symptoms. 		

Table J.1.4. First-Episode Psychosis Work-Up*

TEST	ESSENTIAL	DESIRABLE	IF INDICATED	RATIONALE	
CBC	X				
Electrolytes	X				
Renal function tests	х				
Liver function tests	X				
ESR	X			Broadly screen for inflammatory and rheumatologic disorders	
Antinuclear antibody	X			Broadly screen for inflammatory and rheumatologic disorders	
Fasting glucose	X				
Lipid profile	X				
Prolactin level	X				
Hepatitis C	X				
Pregnancy test	X				
Urine drug screen	Х				
TSH	X				
FTA-ABS	Х				
HIV test	X				
Ceruloplasmin		X		To rule out Wilson's disease	
Vitamin B12		X		To rule out pernicious anemia	
MRI head	X				
CT head		X		If MRI not available	
EEG			x	If documented history of: seizure, past head injury, uncooperative patient with confusion, or suspicion of narcolepsy	
Lumbar puncture			x	Only if infection is clinically considered and serum alone is inadequate to establish a diagnosis.	
Karyotype			x	Only if physical presentation or family history suggests presence of a genetic syndrome.	
Heavy metals			x	If home/work environment suggests exposure to toxic substances	
Eye exam			X	If concern about cataracts.	

*adapted from Freudenreich et al (2009)

Delirium

Key Questions Does the patient have a waxing/waning level of consciousness? If so, for how long? Are there vital sign abnormalities? Does the patient have signs of infection or illness? Are there laboratory abnormalities?

Clarifying and then treating the underlying etiology is the crucial aspect of delirium treatment. However, complete resolution of delirium symptoms may take anywhere from days to months after treating the underlying cause. Managing the symptoms of delirium during the period of work-up and treatment can help decrease the risk of avoidable complications. Environmental measures are a lowrisk and potentially high-yield intervention in addressing delirium in children and adolescents, as it may decrease the need for medication. Environmental measures include:

- Ensuring consistency in the staff working with the patient as much as possible.
- Opening windows for daylight exposure to help regulate the sleep-wake cycle.
- Clustering items of care (i.e., testing, blood extraction, medications) to minimize sleep disruption.
- Ensuring that family or staff are frequently at bedside to reassure and re-orient the patient.
- Keeping familiar toys, books, or games at bedside.

If delirium symptoms persist after the implementation of environmental measures, or are interfering with treatment, medication may be necessary. However, it should be noted that there are limited controlled data about effectiveness of medications; recommendations are largely based on clinical experience and expert opinion.

Using medication to control delirium symptoms should be based on the patient's current condition, the underlying etiology for the delirium, and the potential risks and benefits associated with the medication in question. Medications like melatonin and alpha-2-agonists may help with sleep disturbance. Alpha-2-agonists may also help with agitation but carry risks of hypotension and should be used with caution in youth with vital sign instability. Gabapentin may alleviate anxiety in delirious patients, although it should be avoided in children with renal dysfunction. Benzodiazepines and antipsychotics can help decrease acute agitation. However, they both can cause a worsening of the delirium, potential dependence for benzodiazepines, arrhythmias and seizures for antipsychotics, and excess sedation for both. If antipsychotics are clinically indicated, second generation agents have a more favorable side effect profile as compared to first generation ones. Regardless of what is used, patients who are started on a medication for the treatment of delirium should be closely monitored for the impact on delirium symptoms as well as for potential adverse effects.

Common causes of delirium in children and adolescents

Medical

- Fever
- Nonconvulsive status epilepticus
- Childhood confusional migraine
- Cerebral systemic lupus erythematosus
- End stage HIV/AIDS

Medication related

- Anticholinergic
- Antipsychotic
- Benzodiazepine
 withdrawal
- Drugs of abuse

Intoxication and Overdose

Ke	ey Questions
•	What are the patient's vital signs?
•	Is the patient able to describe what substance taken?
•	When did the patient last use the substance(s)?
•	Acute withdrawal from benzodiazepines or alcohol and alcohol intoxication
	can be life-threatening and must be addressed immediately with medical
	stabilization.

The initial step in any presentation of overdose or intoxication is emergency medical evaluation and triage, with particular attention to circulation, airway, and breathing. Depending on the severity of the patient's presentation, electrolytes, blood glucose level, complete blood count, liver function tests, electrocardiogram, blood alcohol level, and urine toxicology may be indicated to identify medical stability, the agent ingested, and potential adverse sequelae of ingestion. Once the ingested agent has been identified, providers should contact poison control services (if available) for specific guidance on evaluation, monitoring, and medical treatment. If the agent used can cause an intoxication or withdrawal syndrome, a psychiatric consultation may help the medical team with management of agitation or distress. Tables J.1.5 and J.1.6 summarise the toxic syndromes for various ingestions as well as the intoxication and withdrawal symptom profiles for recreational substances (Olsen et al, 2007, Radovanovic et al, 2000).

SUBSTANCE	TOXIC SYNDROME	
Salicylate	 Dizziness, nausea, vomiting, tinnitus, tachypnea, tachycardia, fever, lethargy, coma, seizures, cardiopulmonary failure, death 	
Acetaminophen/ paracetamol	 Within 24 hours after ingestion: May initially be asymptomatic; nausea, vomiting, diaphoresis Between 24-72 hours after ingestion: right upper quadrant pain, transaminitis, elevated INR, renal damage Longer than 72 hours after ingestion: fulminant liver failure, hepatic encephalopathy, coagulopathy, hypoglycemia, renal failure, death 	
Diphenhydramine	 Less than 0.3 grams: somnolence, tachycardia, nausea, vomiting, dizziness, blurry vision, urinary retention, constipation, xerostomia Between 0.3 - 1 gram: agitation, confusion, hallucinations, QTC prolongation Greater than 1 gram: delirium, psychosis, seizure, cardiac arrhythmia, coma, death 	
Selective Serotonin Reuptake Inhibitors (SSRIs)	 Serotonin syndrome: Altered mental status (anxiety, agitation, disorientation) Neuromuscular dysfunction (tremor, hyperreflexia, myoclonus, rigidity) Autonomic instability (hypertension, tachycardia, tachypnea, hyperthermia, diaphoresis, xerostomia, mydriasis, gastrointestinal distress, flushing, arrhythmia) 	
Lithium	 Dizziness, vomiting, diarrhea, nystagmus, tremor, ataxia, tachycardia, confusion, muscle weakness, arrhythmia, seizures, hypotension, death 	

Table J.1.5. Common Substances in Overdose

Table J.1.6. Intoxication and Withdrawal Symptoms of Common Recreational Substances and Recommended Treatment

SUBSTANCE	INTOXICATION	WITHDRAWAL	TREATMENT
Alcohol Sedatives Hypnotics	edatives nystagmus, confusion, paradoxical intact reality-testin		Benzodiazepine taper using the <u>Clinical Institute</u> <u>Withdrawal Assessment for</u> <u>Alcohol (CIWA-A)</u> Referral to substance use treatment
Opioids	Sedation, euphoria, miosis, nausea, constipation, urinary retention, respiratory depression, hypotension, bradycardia, cardiopulmonary collapse, respiratory arrest, coma, death	Flu-like symptoms, shaking, diaphoresis, gooseflesh, mydriasis, yawning, rhinorrhea, nausea, vomiting, diarrhea, anxiety, depression, akathisia, cramps	Supportive care using the Clinical Opiate Withdrawal Scale (COWS) Buprenorphine induction, Methadone, or clonidine Referral to substance use treatment
Stimulants	Tachycardia, hypertension, tachypnea, hyperthermia, diaphoresis, mydriasis, anorexia, euphoria, agitation, anxiety, decreased reality testing, hallucinations	Intense dysphoria, anxiety, fatigue, restlessness, increased appetite, cognitive slowing, vivid dreams, sexual dysfunction, suicidality	Supportive care Cardiac monitoring Benzodiazepines for acute agitation Referral to substance use treatment
Cannabis	Conjunctival injection, impaired short-term memory, impaired attention, impaired motivation, ataxia, perceptual disturbance, increased appetite, euphoria or relaxation	Decreased appetite, difficulty sleeping, irritability, anxiety, headaches, nausea, abdominal pain	Supportive care Benzodiazepines for acute agitation Referral to substance use treatment
Hallucinogens (PCP, MDMA, LSD, psilocybin, ketamine, GHB)	Altered level of consciousness, dissociation, perceptual disturbance, euphoria, agitation, aggression, tachycardia, hypertension, diaphoresis	Variable	Supportive care Referral to substance use treatment



Intoxicated youth are increasingly presenting to emergency services (photo: Daniel Neves)

Depressive Symptoms

Key Questions

- What are patient's symptoms?
- How long have these symptoms been present?
- Is the patient in mental health treatment and if so, where?
- What is the patient's current level of functioning? How far is this from baseline?
- Does the patient have suicidal ideation, intent, plan? If so, describe in detail.
- Has the patient done anything to try to end his/her life? If so, when and what.

In an emergency, psychiatric evaluation of a patient with known or suspected depressive symptoms, in addition to understanding the depressive symptomology, it is imperative to characterize suicidal ideation (intent, planning, previous attempts) and the patient's current and baseline level of functioning. These two key areas of the history will largely dictate the level of care needed. How to deal with suicidality is described above. Briefly, patients at high risk for suicide will likely require a safe environment, typically, inpatient admission. In patients whose depressive symptoms are so severe as to render them unable to function (eat, drink, attend to activities of daily living), inpatient admission may also be warranted.

There are many scales to measure depression severity (Zuckerbrot et al, 2007). Examples include the Columbia Depression Scale and the Mood and Feelings Questionnaire (MFQ) (Angold et al, 1995). Both are free to use and the latter is available in multiple languages.

Fearful/Mute

Key Questions

- How long has the patient been presenting this way?
- Have there been any changes in the patient's life-home, school, friends?
- Does the patient feel safe at home? School? Outside of school? Is anyone in the patient's life threatening him/her?
- Is there a history of alleged or proven abuse or neglect? Has child protection services ever been involved?
- Has the patient ever had similar symptoms in the past?

The differential diagnosis for a patient who is fearful or mute is broad and includes anxiety, acute trauma or abuse, oppositional behavior, selective mutism, and medical illness. History should focus on changes in the patient's life at home or at school, past and current trauma, and history of similar presentations. Consultation with specialists in pediatrics, neurology, and social work/child welfare may be helpful.

Mistreatment

Key Questions

- What are the allegations of abuse or neglect?
- Is there evidence suggesting mistreatment even if there are no explicit reports?
- Who is the alleged perpetrator?
- With whom does the patient reside? Names and ages of all people, including children, in the domicile.
- A full head-to-toe medical exam, documenting any marks and bruises, must be completed.
- Follow the requirements relating to child protection in your state or country.

Encountering evidence of child abuse and neglect is one of the most emotionally-charged experiences in child emergency psychiatry. Abuse and neglect can be both the response to and the cause of psychiatric symptoms in children. Assessing for signs of abuse or neglect needs to be handled with care and empathy and providers should adjust their approach so that screening questions are developmentally appropriate for the patient. Whenever possible, providers should interview children and adolescents without their caregiver present when assessing for abuse as youth may not feel safe talking about abuse in front of their caregiver, particularly if their caregiver is the abuser.

Younger children may respond better to indirect questions like "What do your parents do when you get in trouble?" or "Do other people ever touch your private parts?" Older children and teenagers may respond to more direct questions such as "Have you ever felt mistreated?" or "Has anyone ever touched you in a way that made you feel uncomfortable?" Answers to these questions should guide more direct questioning about physical, emotional, or sexual abuse or neglect. Even with direct questioning, many children will not feel comfortable disclosing abuse and neglect. Open-ended exploration of what their lives are like at home may reveal red flags. Additionally, if patients disclose abuse, it is important to only get the information that you need for treatment and disposition for the patient. Delving too deeply into the details of the abuse could cause the patient further distress and could contaminate the evidence and potentially undermine legal proceedings later on (see also chapters B.1 and J.14).





Trends in psychiatric emergency department visits among youth and young adults in the US (3:26)

Photo: La Voz de Galicia

Parent/Child/School Conflict

Key Questions

- What are the presenting behaviors and degree of harm to others/property?
- What are the circumstances surrounding these behaviors?
- Are these new behaviors or chronic?
- Is the patient in psychiatric treatment?
- What is the patient's current educational status (e.g., special education)?

Parent/child conflict or conflict at school are common emergency presentations. It is incumbent upon the clinician to obtain a history of the behavior, circumstances surrounding it (antecedents and consequences), and whether the behaviors are new or chronic in nature. Parents and caregivers are often understandably frustrated or overwhelmed when seeking help. Clinicians should focus on whether there is an underlying psychiatric disorder amenable to treatment or if it is a social crisis.

Children and adolescents also may present to the ED after conflict at school, either with peers, teachers, or administrative staff. In these cases, apart from conducting an assessment, understanding the function of the behavior and its context is the key for management. Further, the patient's educational status (e.g., regular vs. special education) is also crucial in understanding the resources available to support the student. For every patient, clinicians should obtain collateral information from at least one school official to ensure a complete history. Because of the dearth of child and adolescent mental health clinicians, this emergency assessment may be the first or only one the child will undergo and recommendations can carry significant weight.

Homelessness

Key Questions

- Where has the patient been staying? Does the patient feel safe?
- What are the risk factors for suicide and homicide?
- What is the patient's current physical health status?
- Is there an underlying psychiatric diagnosis or substance use?
- Would the patient be open to referral for housing, financial aid, vocational support?

A study looking at the prevalence of psychiatric conditions among homeless adolescents found that 80% had a psychiatric disorder (Aichorn et al, 2008). The most common was substance use disorder (65%). Other common diagnoses included mood, eating and anxiety disorders. Over half had a history of self-harm and 25% reported at least one suicide attempt. This study also found that the longer a youth was homeless, the more likely it was for the youth to have a psychiatric disorder. Homeless youth engage in riskier behaviors than youth in the general population (Milburn et al, 2006). These high-risk behaviors include shoplifting,

After an extended trip to Lebanon, a 15 year old Canadian female of Lebanese background had trouble readjusting. Parents noticed a significant change in her behavior, and conflict ensued. The youth began to engage in high risk behaviors - staying out all night, not attending school, became defiant and disrespectful and, against parents' wishes, began visiting another community with a large number of peers of Lebanese origin. This resulted in multiple visits to the ED with her overwhelmed parents insisting she was "mentally ill." On one occasion the youth had assaulted her mother, so much so that charges were laid and she was asked to leave home. Aggressive outbursts led to more visits to the ED involving grueling meetings with the family and attempts to improve the situation.

While waiting for an outpatient appointment, the family doctor prescribed risperidone for her impulsive aggression. Subsequently, following a fight with her mother, she got onto a bus and ingested about 10 tablets of risperidone. She then developed palpitations, became scared and called her mother who took her back to the ED, where she underwent monitoring and overnight observation. She told the crisis worker the next morning that she had not intended to kill herself. Hospitalization was offered but refused. However, she became more cooperative and agreed to initiate safety planning, which included temporary placement with an extended family member (Carandang et al, 2012).

prostitution, substance use, multiple sexual partners, and gang involvement (Carandang et al, 2012).

The evaluation must include a risk assessment for suicide and homicide as well as an evaluation of physical health status. It is also necessary to explore the patient's living situation and to provide information about housing, financial aid, educational, and vocational supports. Referral for social services support and outpatient mental health follow-up may also be indicated; compliance with follow up is usually low (Carandang et al, 2012).

Developmental Disability and Autism Spectrum Disorder (ASD)

Key Questions

- What are the behaviors noted in this current crisis?
- Are these behaviors a change from the typical ASD symptoms?
- How have these behaviors changed? Are they new or an escalation of existing behaviors
- What are the typical antecedents to these behaviors?
- What are the typical consequences or responses to these behaviors?

Youth ages 0-17 with autism spectrum disorder (ASD) are 30 times more likely to present to the ED than youth without ASD (Lytle et al, 2018). One US study showed that youth with ASD who presented to the ED were older, more likely to have public insurance, and more likely to have non-urgent ED visits. Of these visits, 13% were for behavioral or psychiatric problems; this is in contrast to youth without ASD where less than 2% of visits were for psychiatric complaints. Youth with ASD were more likely to have repeat visits and be admitted to a psychiatric or medical unit compared to those without ASD (Lytle et al, 2018)

Management of Agitation in Patients with ASD in the ED

Acute agitation is one of the most frequent complaints for patients with ASD or developmental disability presenting to the pediatric ED with a behavioral health complaint (McGonigle et al, 2014). Given this presentation, it is imperative to understand possible etiologies and swiftly manage agitation.

First and foremost, the clinician should conduct a rapid assessment of the presenting behaviors. This can be conceptualized as a brief, focused, functional behavioral analysis. Questions for parents/legal guardians should target the presenting behavior and include the key questions above.

Clinicians should conceptualize agitation in ASD in a similar way to delirium. In other words, *agitation in patients with ASD has a medical etiology until proven otherwise*. The differential diagnosis for agitation in patients with ASD is broad and includes constipation related to poor nutrition or medications; seizures (25-35% risk of seizures in patients with ASD); head, eyes, ears, nose, throat problems including ear infections, dental infections, pain from poor dental hygiene or care; sleep disturbances including obstructive sleep apnea; undetected injuries; and urinary tract infections (McGonigle et al, 2014). After medical etiologies for

agitation have been ruled out, psychiatric issues should be considered. This patient population has high rates of mood disorders in addition to the higher frequency of sensory and communication issues.

A medical cause is more likely if the patient has abnormal vital signs, memory loss, acute delirium, headache with focal neurologic deficits or seizures, increased muscle tone or weakness, temperature intolerance, or overt signs of trauma. It is imperative that clinicians consider catatonia in this population. One should inquire about loss of ability to perform activities of daily living, slowing of speech, or change in social interactions (McGonigle et al, 2014).

If psychotropic medication is indicated, this should be started at a low dose and increased slowly. Both risperidone (starting daily dose 0.5mg-1mg) and aripiprazole are FDA approved for irritability in ASD. The recommended starting dose for olanzapine—less well studied—is 2.5mg-5.0mg. There is limited data to support midazolam and lorazepam in this patient population in the ED (McGonigle 2014)

The ED Experience of Families of Children with Developmental Disability

Parents' surveys suggest that communication issues, insufficient staff knowledge about developmental disability, and inadequate involvement of parents impact negatively on their experience with the ED, while staff knowledge about developmental disability, child- and family-centered care, and clarity of communication impact positively (Nicholas et al, 2016). In this line, there has been recent work to create evidence-based sensory-friendly pediatric emergency departments. For example, the waiting room is often described as overwhelming, loud, and bright. Providing families with noise-cancelling headphones, fidget and sensory tools, a storyboard about the ED visits, and staff education—including learning specific techniques for distraction, communication, procedures, and deescalation—can help (Wood et al, 2019).

Deaf/Blind

Key Issues

- Hospitals ought to provide effective means of communication for patients who are deaf or blind. This is mandated in the US (Americans with Disabilities Act 1990). Similar laws or expectations exist in other countries.
- What is the patient's preferred method of communication?

People who are deaf, hard-of-hearing, or blind rely on myriad ways to communicate. The Americans with Disabilities Act of 1990 mandates all hospital programs and services to provide effective means of communication for patients, families, and visitors for those who are deaf, hard-of-hearing or blind, and this should be the expectation everywhere. Examples of such means of communication include Sign Language interpreters; oral interpreters (specially trained to articulate speech silently and clearly, sometimes rephrasing words or sentences to give higher visibility on lips); and computer assisted real-time transcription (CART), among others.

The patient is a 16-yearold, grade 9 girl who lives with her mother. Over the past two months, she had exhibited depressive symptoms characterized by tearfulness and disrupted sleep. The patient and her mother had been evicted from their apartment four months earlier and had to spend several weeks at a homeless shelter. They have since found an apartment to rent, but the patient is now worried that her mother will kick her out of the house because she recently turned 16, and her mother had been making comments that the patient should find a job because she has to take care of herself eventually. At times they did not have money to buy food. The patient and her mother fought constantly; she dropped out of school because her home life was too stressful to focus on schoolwork.

The mother brought the patient to the ED because she was concerned about her daughter being depressed and dropping out of school, spending most of her day isolated in her room. The patient denied suicidal ideations. The patient was diagnosed with adjustment disorder with depressed mood and referred for outpatient mental health follow-up (Carandang et al, 2012).

Click here to view the US documents on communicating with people who are deaf or hard of hearing in hospital settings

Out-of-Home Placement

Key Questions

- Where and with whom does the patient reside?
- Who has legal guardianship?
- Are there restrictions for the patient to communicate or see biological parents?
- Are there active court cases?

Patients presenting with psychiatric emergencies who do not live at home present important legal considerations. Because laws and practices vary between countries, clinicians need to be aware of the legal framework in their legislature. It is paramount for the clinician to understand who has legal guardianship and medical decision-making rights (see below). If the patient is in foster care, contact with the foster care agency is crucial to understand these questions, as often the biological parent retains legal rights and must consent to treatment.



Patients in Corrective Institutions

Key Questions

- Which corrective institution?
- What is the patient's past psychiatric history?
- Does the patient have past suicide attempts? Inpatient psychiatric admissions?
- Does the patient have substance use?
- Is there a history of trauma?

Studies of adolescents in juvenile justice settings show that one-half to three-quarters meet criteria for one or more psychiatric disorders. One-third to one-half meet criteria for substance use disorder, and more than one-third for a disruptive behavior disorder. It has also been shown that 80 to 90% of youths in juvenile justice experienced traumatic events (Wasserman et al, 2010). Therefore, patients presenting with psychiatric emergencies in corrective institutions require thorough psychiatric evaluation.

LGBTQIA

Key Issues

- Clarify preferred name and pronouns.
- Refrain from gendered language when possible.
- Assess the patient's level of support at home and in the community.
- Respect confidentiality when discussing findings with family and treatment providers.

Working with youth who are exploring gender and sexual identitygrouped under acronym LGBTQIA-complicates issues of confidentiality. Although many cultures around the world are growing more accepting of gender and sexual minority groups, there is still significant stigmatization. The stress of this stigmatization can play out both at a cultural level (risk of violence or oppression in the community) as well as a familial level (risk of violence or conflict within the family unit). Youth who identify as LGBTQIA are at a higher risk for psychiatric disorders (Coulter et al, 2019). Clinicians should provide culturally competent care to LGBTQIA youth who present with psychiatric emergencies. This includes clarifying their preferred name and pronouns, refraining from gendered language wherever possible (e.g., rather than "Do you like boys or girls?", ask "Do you have a special someone?" or "Have you started having romantic interests yet?"), and assessing the level of support they have in their home and community. If the patient indicates that they are not open about their identity at home, providers should respect their confidentiality when discussing the findings of evaluation and recommendations for treatment with caretakers. Additionally, given that caregivers can request copy of medical records, providers should ask the youth if they would like the information they share to be included in their medical record. In situations where the details of a youth's gender or sexual identity are pertinent to evaluation or treatment, providers should take reasonable steps to ensure the youth's safety at home and to support the youth in disclosing their identity to the family in order to facilitate treatment.

SYSTEMS OF CARE

Ethics

The laws that inform clinical practice vary considerably from country to country or state to state. Parsing out the details of each particular government's guidelines would need a full academic volume on its own. This section summarizes widely accepted practices in child emergency psychiatry as well as pertinent exceptions that providers should keep in mind (see also chapter A.1 of the eTextbook). Despite differences across cultures, four ethical principles inform guidelines for medical providers. Beneficence is the notion that clinicians should act in a patient's best interest. Non-maleficence holds that providers should refrain from harming patients. Justice requires impartiality from physicians no matter the background or identity of their patients. Autonomy is the tenet that providers must respect the decision-making capabilities of the people whom they treat (Ostermeyer et al, 2017). Although the first three of these ethical principles are broadly applicable across the lifespan, the concept of autonomy has unique implications when working with children. In general, physicians require informed consent from patients to provide evaluation and treatment, and the validity of the consent depends on the decision-making capacity of the patient. Adults, in general, are assumed to have decision-making capacity while youth (i.e., younger than 16 or 18 years of age) do not. When youth require medical treatment, their adult caregivers provide consent (with some exceptions detailed later). Informed consent requires that patients and caregivers are made aware of the indications for, risks, and benefits of, and alternatives to the evaluation and treatment offered by the medical providers (Ostermeyer et al, 2017). Those with capacity to give consent should be able to:

- Understand the information given to them about the treatment
- Remember the information relevant to the decision
- Use or weigh the information relevant to the decision
- Communicate their decision.

The weight given when assessing decision-making capacity should also be applied along a sliding scale, such that higher risk decisions (e.g., neurosurgery, chemotherapy) would require a higher standard for assessing capacity than lower risk decisions (e.g., drawing blood, intravenous fluids) (Appelbaum, 2007; Ostermeyer et al, 2017). These issues can coalesce in variable and complicated ways when dealing with child psychiatric emergencies.

Consent Issues

When children present with psychiatric emergencies, the main clinical questions usually center around disposition. Can the child be discharged home with outpatient follow-up? Do they require extended observation? Is inpatient psychiatric admission necessary? Given that children in general lack decisionmaking capacity, caregivers must give informed consent for anything ranging from release of information to third parties to inpatient admission. Additionally, clinicians must make a reasonable effort to obtain consent from caregivers, even if certain aspects of the evaluation and treatment were necessarily initiated prior to consent being obtained (Fortunati & Zonana, 2013). There are however exceptions. Some jurisdictions may allow greater leniency in providing emergency care without informed consent. For example, when contacting child protection services if children present with a history or signs suggestive of abuse or neglect. Emancipated minors may be another exception. In some areas of the world, youth who are married, have children of their own, are members of the military, or live on their own are considered emancipated, meaning that they are legally capable of making decisions for themselves (Fortunati & Zonana, 2013). Providers should learn about local laws and practices around minor's consent.

In most countries, in a situation in which a youth needs to be psychiatrically hospitalized, this can be accomplished voluntarily (with caregiver consent) or involuntarily (without caregiver consent). Involuntary psychiatric hospitalization is an option but it should be used sparingly. If a provider believes that psychiatric hospitalization is indicated and parents refuse, there may be grounds for reporting to child protection services for medical neglect. This can cause ruptures in trust within the family as well as between the family and the treatment team. Depending on the country, involuntary hospitalization may require further procedures and review to certify its need. Additionally, in some jurisdictions, although providers can involuntarily hospitalize children, often cannot administer medication without a court order if caregivers object. Thus, hospitalizing children involuntarily should only be pursued if the risk to the safety of the child is high.

Reporting Abuse

The US Child Abuse Prevention and Treatment Act of 1974 establishes mandatory reporting for "any act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm." Most countries have some kind of reporting laws. Many nominate certain people as "mandated reporters," typically including physicians and mental health providers. In the course of an evaluation, when a clinician uncovers evidence of abuse or neglect, they are required to report this evidence to the local child protection services to determine if an investigation or intervention is required. Providers may inform the family if a child protection report has been made, although this is not obligatory. This conversation can be tense and difficult to navigate. It may be helpful to highlight that your role is to report any evidence of abuse or neglect and is mandated by law. Additionally, caregivers may benefit from knowing what happens after a report is made. If there is doubt about whether information disclosed requires reporting, it would be wise to discuss the situation beforehand with a senior colleague.

Duty to Warn

Tarasoff v. Regents of the University of California (1968) is a landmark case which established a new standard in mental health care in the US whereby providers, when presented with evidence suggestive that their patient poses an imminent risk of harm to another person, have a *duty to protect* (by ensuring that the patient is detained or treated) and a *duty to warn* (by informing the intended target of the patient's intent). Although the legal ramifications of this case vary widely even within the boundaries of the US, the basic tenets of the case should still inform clinical practice, particularly in psychiatric emergencies. This principle, though not universal, is now widely accepted; providers should verify the standards of duty to protect and duty to warn in the jurisdiction in which they practice. If a patient makes a threat to the well-being of another, reasonable steps should be taken to address the patient's risk of harm to others, which may need to include hospitalization (if related to psychiatric symptoms) or communicating the patient's threat to the police. If the patient cannot be detained or treated, providers should inform the intended targets of the patient's threat. In situations in which the duty to warn is unclear, providers should obtain advice from a senior colleague or a legal consultation (Fortunati & Zonana, 2013).

Confidentiality

Information shared by the patient over the course of evaluation and treatment is not to be shared with people outside of the treatment team. Maintaining confidentiality with patients is a crucial component of fostering trust and encouraging adherence to treatment. Most jurisdictions codify the protection of confidential information for adults, but children are not explicitly mentioned in many of these laws. In spite of this, children should be afforded some measure of confidentiality commensurate with their developmental level and the circumstances of their presentation. The limits of confidentiality should be discussed with the youth and their caregivers from the start of the encounter (Fortunati & Zonana, 2013). In general, topics like safety concerns or symptoms that are discussed as part of treatment should not be kept from caregivers, as without this information they cannot provide informed consent. Third parties outside the family unit may also need to be contacted to obtain collateral details. Information should not be shared with these groups without explicit consent from caregivers unless there is an imminent risk to the safety of the patient or others that warrants disclosure under emergency conditions.



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