

Virginia Commission on Youth

Collection of Evidence-Based Practices

For Children and Adolescents
with Mental Health Treatment Needs

7th Edition





COMMONWEALTH of VIRGINIA

Commission on Youth

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Dear Fellow Citizen of the Commonwealth:

As Chair of the General Assembly's Commission on Youth, it is my pleasure to present the 7th Edition of the *Collection of Evidence-based Practices for Children and Adolescents with Mental Health Treatment Needs*.

The 7th Edition of the *Collection* is designed to be a quick reference guide for those seeking an overview of evidence-based mental health treatments for children and adolescents. This condensed edition provides a description of mental health conditions that affect youth, a discussion of evidence-based treatments, and a compendium of resources for further reading. The 7th Edition is intended to be used in conjunction with the 6th Edition, which provides in-depth information about each disorder, as well as a summary of current research on mental health treatments for children and adolescents. Both editions are available on the Commission's website at <http://vcoy.virginia.gov>.

The 2002 General Assembly, through Senate Joint Resolution 99, directed the Virginia Commission on Youth to coordinate the collection of treatments that are recognized as effective for children, including juvenile offenders, who have mental health treatment needs, symptoms, and disorders. The resulting publication was compiled by the Commission with the assistance of an advisory group of experts pursuant to Senate Joint Resolution 99. The *Collection* was published in House Document 9 and presented to the Governor and the 2003 General Assembly.

To ensure that this information remained current and reached the intended audience, the 2003 General Assembly passed Senate Joint Resolution 358, which requires the Commission on Youth to update the *Collection* biennially and to disseminate it via web technologies. Since 2003, the Commission has updated this resource and made it available through the Commission on Youth website and in print editions.

The Commission on Youth gratefully acknowledges the contributions of its Advisory Group members. For more information about the Virginia Commission on Youth or the *Collection*, I encourage you to visit our website at <http://vcoy.virginia.gov>.

Sincerely,

A handwritten signature in black ink, appearing to read "Dickie", with a stylized flourish at the end.

Richard P. "Dickie" Bell

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The information contained herein is strictly for informational and educational purposes only and is not designed to replace the advice and counsel of a physician, mental health provider, or other medical professional. If you require such advice or counsel, you should seek the services of a licensed mental health provider, physician, or other medical professional. The Commission on Youth is not rendering professional advice and makes no representations regarding the suitability of the information contained herein for any purpose.



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INTRODUCTION

Welcome to the 7th Edition of the *Collection of Evidence-Based Practices for Children and Adolescents with Mental Health Treatment Needs*. This update is designed to be a quick reference guide to evidence-based practices—interventions that have been proven, through scientific testing, to be effective. This short guide includes information from the 6th Edition that is most relevant to non-clinicians, including:

- A brief discussion of each disorder included in the 6th Edition
- A description of treatments and interventions, with a focus on treatments that are evidence-based
- A list of resources and organizations for further information

HOW TO USE THE 7TH EDITION OF THE COLLECTION

The 7th Edition is designed to provide a brief overview of evidence-based treatments and interventions for children and adolescent mental health disorders. It is intended as an educational tool to help inform non-clinicians about treatment options, and it should not be used as a substitute for consultation with a qualified mental health professional.

For more information about disorders and treatments, a comprehensive discussion can be found in the *Collection, 6th Edition*, which is available on the Commission on Youth's website at <http://vcoy.virginia.gov>.

WHAT ARE EVIDENCE-BASED PRACTICES?

Evidence-based practices (EBP) refer to treatments and interventions that have been shown through clinical research to produce positive outcomes. In recent years there has been a shift away from relying on theory-driven treatments (treatments that clinicians believe *should* work, and that *seem to* work) and towards an emphasis on treatments that have been scientifically demonstrated to work in measurable, replicable ways. Identifying EBPs in mental health has significantly aided clinicians in the decision-making process by providing a fair, scientifically rigorous method of evaluating treatment options. In addition, with so many treatment options available, EBPs give parents a way to evaluate those treatments so that they can partner with their child's clinician to determine which intervention offers the best approach.

Although there are no standardized criteria used to determine if a treatment is evidenced-based, in general, EBPs have been tested in at least two randomized controlled trials (a rigorous type of scientific study) and found to be effective. In the *Collection*, these treatments are listed under the heading, “What Works.” Treatments that fall under the heading “What Seems to Work” have less scientific evidence to support their efficacy but are still considered by the medical community to be effective. Treatments that are designated as “Not Adequately Tested” may be effective, but rigorous scientific testing either has not, or cannot, be done. Treatments under the heading “What Does Not Work” have been shown to either not work or to have the potential for harm, and are not recommended. Table 1 describes these treatment categories in more detail.

Table 1
Treatment Categories Used in the *Collection*, 7th Edition

| Levels of Support | Description |
|--|---|
| What Works (Evidence-based Treatment) | Meets all of the following criteria: <ol style="list-style-type: none"> 1. Tested and found effective across two or more randomized controlled trials (RCTs); 2. At least two different investigators (i.e., researcher); 3. Use of a treatment manual in the case of psychological treatments; and 4. At least one study demonstrates that the treatment is superior to an active treatment or placebo (i.e., not just studies comparing the treatment to a waitlist). |
| What Seems to Work | Meets all but one of the criteria for “What Works” or Is commonly accepted as a valid practice supported by substantial evidence |
| Not Adequately Tested | Meets none of the criteria for any of the above categories. It is possible that such treatments have demonstrated effectiveness in non-RCT studies, but their potency compared to other treatments is unknown. It is also possible that these treatments were tested and tried with another treatment. |
| What Does Not Work | Meets none of the criteria above but meets either of the following criteria: <ol style="list-style-type: none"> 1. Found to be inferior to another treatment in an RCT; and/or 2. Demonstrated to cause harm in a clinical study. |

Limitations of Evidence-based Practices in Children’s Mental Health

The trend toward relying on EBPs in children’s mental health treatment has significant limitations, some of which are described in Figure 1. It is important to keep in mind that “evidence-based” does not necessarily mean that a treatment is superior to one with less evidence supporting it. For this reason, EBP designation should be viewed as just one tool in the evaluation of mental health interventions.

Figure 1
Limitations of Evidence-Based Practices

- ▶ An effective treatment may not be classified as an EBP because it cannot be measured by a randomized controlled trial (RCT). For instance:
 - The treatment may produce results that are difficult to quantify scientifically.
 - It may be unethical to test the intervention in an RCT because it would be harmful to withhold treatment from the control group.
 - The nature of the treatment may make it difficult to create a RCT or to control for the placebo effect.
- ▶ Scientific testing may not be the best way to determine a treatment's effectiveness. For example:
 - RCTs cannot measure whether the holistic needs of the individual are met over multiple domains.
 - RCTs are designed to isolate disorders and treatments and are often not the best way to measure the effect of a treatment on an individual with multiple disorders, or the effect of combined treatments.
- ▶ Evaluation of specific interventions is an evolving process; therefore, effective interventions may not yet have been thoroughly tested, or tested on children.
- ▶ Because there is no universal set of standards used to determine whether a practice is evidence-based, lists of EBPs often do not agree with each other. For this reason, there should not be an overreliance on any one organization's list of EBPs.

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

<http://www.aacap.org/>

Facts for Families Guides

https://www.aacap.org/aacap/families_and_youth/facts_for_families/fff-guide/fff-guide-home.aspx

American Academy of Family Physicians

<https://www.aafp.org>

American Psychiatric Association (APA)

<http://www.psych.org>

<http://www.parentsmedguide.org>

American Psychological Association (APA)

<http://www.apa.org/>

Centers for Disease Control and Prevention

<https://www.cdc.gov/>

Familydoctor.org

<https://familydoctor.org/>

Medscape Today Resource Centers (from WebMD)

<https://www.medscape.com/internalmedicine>

National Alliance for the Mentally Ill (NAMI)

<https://www.nami.org/>

National Institute of Mental Health (NIMH)

<http://www.nimh.nih.gov/index.shtml>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov/children>

U.S. Department of Education

Office of Special Education and Rehabilitative Services

<https://www2.ed.gov/about/offices/list/osers/index.html?src=mr>

U.S. National Library of Medicine and the National Institutes of Health

Medline Plus

<https://medlineplus.gov/>

VIRGINIA RESOURCES AND ORGANIZATIONS

Mental Health America of Virginia

<https://mhav.org/>

National Alliance for the Mentally Ill Virginia (NAMI Virginia)

<https://namivirginia.org/>

Virginia Department of Behavioral Health and Developmental Services (DBHDS)

<http://www.dbhds.virginia.gov/>

Virginia Office of Children's Services

<http://www.csa.virginia.gov/>

Voices for Virginia's Children

<https://vakids.org/>

EVIDENCE-BASED PRACTICE RESOURCES

Blueprints for Healthy Youth Development

<https://www.blueprintsprograms.org/>

California Evidence-Based Clearinghouse for Child Welfare

<http://www.cebc4cw.org/>

Casey Family Programs Evidence-Based Practices Catalog

<https://caseyfamilypro-wpengine.netdna-ssl.com/media/Family-First-Interventions-Catalog.pdf>

Evidence-based Prevention and Intervention Support (EPIS) Center (Pennsylvania)

<http://www.episcenter.psu.edu/ebp>

Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Model Programs Guide

<https://www.ojjdp.gov/mpg/Program>

SAMHSA National Registry of Evidence-Based Programs and Practices

<https://www.samhsa.gov/ebp-resource-center>

PRINT RESOURCES

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). American Psychiatric Association. Washington DC: American Psychiatric Publishing, 2013.

The Oxford Handbook of Clinical Child and Adolescent Psychology, by T. H. Ollendick, S. W. White, & B. A. White. Oxford: Oxford University Press, 2018.



REFERENCE CHARTS OF EVIDENCE-BASED PRACTICES

ADJUSTMENT DISORDER

What Works

There are no evidence-based practices at this time.

What Seems to Work

| | |
|------------------------------------|--|
| Interpersonal psychotherapy (IPT) | IPT helps children and adolescents address problems to relieve depressive symptoms. |
| Cognitive behavioral therapy (CBT) | CBT is used to improve age-appropriate problem-solving skills, communication skills, and stress management skills. It also helps the child's emotional state and support systems to enhance adaptation and coping. |
| Stress management | Stress management is particularly beneficial in cases of high stress and helps the youth learn how to manage stress in a healthy way. |
| Group therapy | Group therapy among of like-minded/afflicted individuals can help group members cope with various features of adjustment disorders. |
| Family therapy | Family therapy is helpful for identifying needed changes within the family system. These changes may include improving communication skills and family interactions and increasing support among family members. |

What Does Not Work

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|------------------|---|
| Medication alone | Medication is seldom used as a singular treatment because it does not provide assistance to the child in learning how to cope with the stressor. Targeted symptomatic treatment of the anxiety, depression, and insomnia may effectively augment therapy. |
|------------------|---|

ANOREXIA NERVOSA

What Works

| | |
|--------------------------------|--|
| Family psychotherapy | Family members are included in the process to assist in reduction of symptoms and modify maladaptive interpersonal patterns. |
| In-patient behavioral programs | Individuals are rewarded for engaging in healthy eating and weight-related behaviors. |

| | |
|------------------------------------|--|
| Nutritional rehabilitation | Entails developing meal plans and monitoring intake of adequate nutrition to promote healthy weight gain. |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | Needs further study to be well established; it is used to change underlying eating disorder cognitions and behaviors. |
| Medication | Used primarily after weight restoration to minimize symptoms associated with psychiatric comorbidities. |
| Not Adequately Tested | |
| Individual psychotherapy | Controlled trials have not supported this treatment; however, it may be beneficial during the refeeding process and to minimize comorbid symptoms. |
| What Does Not Work | |
| Group psychotherapy | May stimulate the transmission of unhealthy techniques among group members, particularly during acute phase of disorder. |
| 12-step programs | Not yet tested for their efficacy; discouraged as a sole treatment. |
| Tricyclic antidepressants | Tricyclic antidepressants are contraindicated and should be avoided in underweight individuals and in individuals who are at risk for suicide. |
| Somatic treatments | To date, treatments such as vitamin and hormone treatments and electroconvulsive therapy show no therapeutic value. |

ANXIETY DISORDERS

| | |
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| What Works | |
| Behavioral & cognitive behavioral therapy (CBT) | Treatment that involves exposing youth to the (non-dangerous) feared stimuli and challenging the cognitions associated with the feared stimuli with the goal of the youth's learning that anxiety decreases over time. |
| Selective serotonin reuptake inhibitors (SSRIs) | Treatment with certain SSRIs have been proven to help with anxiety; however, SSRIs may increase suicidal ideation in some youth. |
| What Seems to Work | |
| Educational support | Psychoeducational information on anxiety provided to parents, usually in a group setting. |
| Benzodiazepines | While proven effective, not a first choice treatment because of an increase in the risk of behavioral disinhibition. |
| Computer-based behavioral & cognitive behavioral therapy (CBT) | CBT administered electronically to eliminate long waiting periods or lack of clinical experts in a given area. |
| Not Adequately Tested | |
| Play therapy | Therapy using self-guided play to encourage expression of feelings and healing. |

| | |
|---------------------------------|---|
| Antihistamines or herbs | No controlled studies on efficacy. |
| Psychodynamic therapy | Therapy designed to uncover unconscious psychological processes to alleviate the tension thought to cause distress. |
| Neurofeedback | A type of non-invasive brain training that enables an individual to learn how to change mental and/or physiological activity. |
| Antipsychotics/ neuroleptics | High level of risk of impaired cognitive functioning and tardive dyskinesia with long-term use; contraindicated in youth who do not also have Tourette's syndrome or psychosis. |

ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

| What Works | |
|--|---|
| Behavioral classroom management (BCM) | BCM uses contingency management strategies, including teacher-implemented reward programs, token systems, time-out procedures, and daily report cards (DRCs). Clinicians or parents may work in consultation with teachers to develop a classroom treatment plan. |
| Behavioral parent training (BPT) | BPT teaches the parent to implement contingency management strategies similar to BCM techniques at home. |
| Intensive behavioral peer intervention (BPI) | Intensive BPI is conducted in recreational settings, such as summer treatment programs (STPs). STPs have demonstrated effectiveness and are considered well-established. However, STPs are less feasible to implement than other evidence-based practices. |
| Stimulant: d-Amphetamine | Short-acting: Adderall, Dexedrine, DextroStat Long-acting: Dexedrine Spansule, Adderall XR, Lisdexamfetamine |
| Stimulant: Methylphenidate | Short-acting: Focaline, Methylin, Ritalin; Intermediate-acting: Metadate ER, Methylin ER, Ritalin SR, Metadate CD, Ritalin LA Long-acting: Concerta, Daytrana patch, Focalin XR |
| Serotonin and norepinephrine reuptake inhibitor (SNRI): atomoxetine | Atomoxetine is unique in its ability to act on the brain's norepinephrine transporters without carrying the same risk for addiction as other medications. |
| Not Adequately Tested | |
| Dietary interventions | Interventions include elimination of food additives, elimination of allergens/sensitivities, and use of nutritional supplements. |
| Interactive metronome training | Involves synchronizing of hand and foot exercises to audible tones. |
| Neurofeedback | Involves monitoring brain waves and rewarding focused attention through computerized games and exercises. |

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|---|---|
| Antidepressants | These include bupropion (Wellbutrin), imipramine (Tofranil), nortriptyline (Pamelor, Aventil), clonidine (Catapres) and guanfacine (Tenex). |
| What Does Not Work | |
| Cognitive, psychodynamic, and client-centered therapies | Traditional talk therapies and play therapy have been demonstrated to have little to no effect on ADHD symptoms. ADHD is best treated with intensive behavioral interventions in the youth's environment. |
| Office-based social skills training | Once-weekly office-based training, either one-on-one or in a group setting, have not led to significant improvement in social skills. However, intensive group social skills training that uses behavioral interventions are considered well-established. |

AUTISM SPECTRUM DISORDER (ASD)

| | |
|--|---|
| What Works | |
| Applied behavior analysis (ABA) | Uses principles of learning theory to bring about meaningful and positive change in behavior, build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring), and help generalize these skills to other situations. Also known as early intensive behavioral intervention and comprehensive behavioral treatment for young children (CBTYC). |
| Positive behavioral interventions | Behavioral interventions analyze the cause of a negative behavior and how it is being reinforced, and then offer techniques targeted to promoting positive behaviors. |
| Discrete trial teaching or training (DTT) | A behavioral intervention that uses operant learning techniques to change behavior. Also known as the ABC model (action request, behavior, consequence). |
| Cognitive behavioral intervention package | CBT modified for ASD youth. |
| Language training | Targets the ability to communicate verbally. |
| Modeling | Involves demonstrating a target behavior to encourage imitation. |
| Naturalistic teaching strategies (NTS) | Child-directed strategies that use naturally occurring activities to increase adaptive skills. |
| Parent training package | Involves training parents to act as therapists. |
| Peer training package | Involves training peers on how to behave during social interactions with a youth with ASD. |
| Learning experience: An alternative program (LEAP) | A type of peer training program for peers, teachers, parents, and others. |

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| Pivotal response training (PRI) | Involves targeting pivotal behaviors related to motivation to engage in social communication, self-initiation, self-management, and responsiveness to multiple cues. |
| Schedules | Used to increase independence in youth with ASD. |
| Scripting | Provides scripted language to be used as a model in specific situations. |
| Self-management | Strategies that involve teaching youth to track performance while completing an activity. |
| Social skills package | Aims to provide youth with the skills (such as making eye contact appropriately) necessary to participate in social environments. |
| Story-based intervention | Uses stories to increase perspective-taking skills. |
| What Seems to Work | |
| Augmentative and alternative communication devices | Communication systems designed to complement speech (pictures, symbols, communication boards, or other assistive technology, like tablets, text-to-speech programs, etc.). |
| Developmental relationship-based treatment | Programs that emphasize the importance of building social relationships by using the principals of developmental theory. |
| Exercise | Uses physical exertion to regulate behavior and help with social, communication, and motor skills. |
| Exposure package | Involves gradually exposing youth to the non-dangerous situations that they fear, with a focus on having them learn that their anxiety will decrease over time. At the same time the use of maladaptive strategies used in the past is prevented. |
| Functional communication training | Behavioral method that replaces disruptive or inappropriate behavior with more appropriate and effective communication. |
| Imitation-based intervention | Relies on adults imitating the actions of a child. |
| Initiation training | Involves directly teaching individuals with ASD to initiate interactions. |
| Language training (production and understanding) | Aims to increase both speech production and understanding of communicative acts. |
| Massage therapy | Involves the provision of deep tissue stimulation. |
| Multi-component package | Involves a combination of multiple treatment procedures that are derived from different fields of interest or different theoretical orientations. |
| Music therapy | Aims to teach individual skills or goals through music. |

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| Picture exchange communication system | Involves the application of a specific augmentative and alternative communication system designed to teach functional communication to youth with limited communication skills. |
| Reductive package | Relies on strategies designed to reduce problem behaviors without increasing alternative appropriate behaviors. |
| Sign language instruction | Teaches sign language as a means of communicating. |
| Social communication intervention | Targets some combination of social communication impairments. |
| Structured teaching | Relies heavily on the physical organization of setting, predictable schedules, and individualized use of teaching methods. |
| Technology-based intervention | Presents instructional materials using the medium of computers or related technologies. |
| Theory of mind training | Aims to teach youth to recognize and identify others' mental states. |
| Not Adequately Tested | |
| <ul style="list-style-type: none"> Animal-assisted therapy (e.g., hippotherapy: the use of horseback riding as a therapeutic or rehabilitative treatment) Auditory integration training Concept mapping DIR/Floortime Facilitated communication | <ul style="list-style-type: none"> Gluten-free and/or casein-free diet Movement-based intervention SENSE theatre intervention Sensory intervention package Social-behavioral learning strategy Social cognition intervention Social thinking intervention |

BINGE EATING DISORDER

| | |
|--|---|
| What Works | |
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | The most effective independent treatment option; it is used to change underlying eating disorder cognitions and behaviors. |
| Interpersonal psychotherapy (IPT) | Attempts to reduce the use of binge eating as a coping mechanism by supporting the development of healthy interpersonal skills. |
| Medication | Antidepressants, namely SSRIs, have effectively reduced binge/purging behaviors, as well as comorbid psychiatric symptoms. |
| Not Adequately Tested | |
| Dialectical behavior therapy (DBT); mindfulness and yoga-based interventions | These treatments are suggested as future areas of research. |

| What Does Not Work | |
|---|---|
| Nutritional rehabilitation and counseling | Although initial weight loss is associated with these treatments, weight is commonly regained. |
| 12-step programs | Discouraged as a sole treatment because they do not address nutritional or behavioral concerns. |

BIPOLAR AND RELATED DISORDERS

| What Works | |
|--|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Medication | Mood stabilizers (lithium)/Anticonvulsants Second-generation antipsychotics |
| Family-focused psychoeducational therapy (FFT) | Helps youth make sense of their illness and accept it and also to better understand use of medication. Also helps to manage stress, reduce negative life events, and promote a positive family environment. |
| Child- and family-focused cognitive behavioral therapy (CFF-CBT) | Emphasizes individual psychotherapy with youth and parents, parent training and support, and family therapy. |
| Multifamily psychoeducation groups (MFPG) | Youth and parent group therapy have been shown to increase parental knowledge, promote greater access to services, and increase parental social support for youth. |
| Not Adequately Tested | |
| Interpersonal social rhythm therapy (IPSRT) | Works to minimize the effects of life stressors by helping youth establish regular patterns of sleep, exercise, and social interactions. |
| Omega-3 fatty acids | Unclear if supplementation helps with depressive symptoms when used in conjunction with other treatments. |
| Topiramate Oxcarbazepine | Anticonvulsants; not proven to be effective in youth or adults. |
| Dialectical behavior therapy (DBT) | Family skills training and individual therapy; not proven to help with mania or interpersonal functioning. |

BODY DYSMORPHIC DISORDER

What Works

There are no evidence-based practices at this time.

Not Adequately Tested

| | |
|---|---|
| Selective serotonin reuptake inhibitors (SSRIs) | Possibly efficacious because of effectiveness with similar disorders. |
|---|---|

| | |
|------------------------------------|--|
| Cognitive behavioral therapy (CBT) | Shows promise because of its effectiveness with similar disorders. |
|------------------------------------|--|

BULIMIA NERVOSA

What Works

| | |
|------------------------------------|--|
| Cognitive behavioral therapy (CBT) | The most effective independent treatment option; it is used to change underlying eating disorder cognitions and behaviors. |
|------------------------------------|--|

| | |
|---------------------|---|
| Combined treatments | A combination of CBT and medication seems to maximize outcomes. |
|---------------------|---|

What Seems to Work

| | |
|------------|--|
| Medication | Antidepressants, namely SSRIs, have effectively reduced binge/purging behaviors, as well as comorbid psychiatric symptoms. |
|------------|--|

Not Adequately Tested

| | |
|--------------------------|--|
| Individual psychotherapy | Compared to CBT, few individual therapeutic approaches have been effective in reducing symptoms. |
|--------------------------|--|

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|----------------|---|
| Family therapy | May be more beneficial than individual psychotherapy, but outcomes should be considered preliminary at this time. |
|----------------|---|

What Does Not Work

| | |
|-----------|--|
| Bupropion | Bupropion has been associated with seizures in purging individuals with BN and is contraindicated. |
|-----------|--|

| | |
|--------------------------------------|--|
| Monoamine oxidase inhibitors (MAOIs) | MAOIs are potentially dangerous in individuals with chaotic bingeing and purging and their use is contraindicated. |
|--------------------------------------|--|

| | |
|------------------|---|
| 12-step programs | Discouraged as a sole treatment because they do not address nutritional or behavioral concerns. |
|------------------|---|

DEPRESSIVE DISORDERS – CHILDREN

| What Works | |
|--|---|
| Stark's cognitive behavioral therapy (CBT) | Stark's CBT (child only or child plus parent) includes mood monitoring, mood education, increasing positive activities and positive self-statements, and problem solving |
| Fluoxetine in combination with CBT | Fluoxetine, a selective serotonin reuptake inhibitor (SSRI), is the only antidepressant approved by the FDA for use in children (eight years old or older) for depression. For moderate to severe depression, fluoxetine in combination with psychosocial therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| What Seems to Work | |
| Penn prevention program (PPP) | PPP is a CBT-based program that targets pre-adolescents and early adolescents who are at risk for depression. |
| Self-control therapy | Self-control therapy is a school-based CBT that focuses on self-monitoring, self-evaluating, and causal attributions. |
| Behavioral therapy | Behavioral therapy includes pleasant activity monitoring, social skills training, and relaxation. |

DEPRESSIVE DISORDERS – ADOLESCENTS

| What Works | |
|---|--|
| Cognitive behavioral therapy (CBT) provided in a group setting | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |
| Interpersonal therapy (IPT) | In IPT, the therapist and patient address the patient's interpersonal communication skills, interpersonal conflicts, and family relationship problems. |
| Fluoxetine in combination with CBT | Fluoxetine, a selective serotonin reuptake inhibitor (SSRI), is the only antidepressant approved by the FDA for use in children (eight years old or older) for depression. For moderate to severe depression, fluoxetine in combination with therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| What Seems to Work | |
| CBT in a group or individual setting with a parent/family component | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |

| | |
|---|--|
| Adolescent coping with depression (CWD-A) | CWD-A includes practicing relaxation and addressing maladaptive patterns in thinking, as well as scheduling pleasant activities, and learning communication and conflict resolution skills. |
| Interpersonal psychotherapy for depressed adolescents (IPT-A) | IPT-A addresses the adolescent's specific interpersonal relationships and conflicts, and helps the adolescent be more effective in their relationships with others. |
| Physical exercise | Physical exercise has shown promise in improving symptoms of depression in adolescents. Group-based and supervised light- or moderate-intensity exercise activities 3 times a week for a period of between 6 to 11 or 12 weeks may bring about an improvement in depression. |
| Not Adequately Tested | |
| Dietary supplements | Supplements such as St. John's Wort, SAM-e, and Omega-3 have not been adequately tested and may have harmful side effects or interact with other medications. Parents should discuss supplement use with a mental health care professional. |
| What Does Not Work | |
| Tricyclic antidepressants | These antidepressants can have problematic side effects and are not recommended for children or adolescents with depression. |

DEVELOPMENTAL COORDINATION DISORDER

| | |
|---|--|
| What Works | |
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive motor intervention | Therapists design a set of exercises into steps for children to practice at home. Emotional, motivational, and cognitive aspects are emphasized, as children are taught how to plan a movement, how to execute it, and how to evaluate their success. Building self-confidence through positive reinforcement is a critical goal, as success depends upon the patient's motivation to practice outside of therapy. |
| Physical and occupational therapy | Tailored to a child's specific needs. |

DISRUPTIVE, IMPULSE-CONTROL, AND CONDUCT DISORDERS

| What Works | |
|---|---|
| Parent management training (PMT) | <p>PMT programs focus on teaching and practicing parenting skills with parents or caregivers. Programs include:</p> <ul style="list-style-type: none"> • Helping the Noncompliant Child • Incredible Years • Parent-child interaction therapy • Parent MT to Oregon model |
| Multisystemic therapy (MST) | <p>MST is an intensive family- and community-based treatment that addresses the multiple determinants of serious antisocial behavior. MST clinicians use empirically validated approaches, such as cognitive-behavioral therapy and pragmatic family therapies, and typically provide individual and family counseling and 24-hour crisis management.</p> |
| Cognitive behavioral therapy (CBT) | <p>CBT emphasizes problem-solving skills and anger control/coping strategies.</p> |
| CBT & parent management training | <p>Combines CBT and PMT.</p> |
| What Seems to Work | |
| Multidimensional treatment foster care | <p>Community-based program alternative to institutional, residential, and group care placements for use with severe chronic delinquent behavior; foster parents receive training and provide intensive supported treatment within the home.</p> |
| Not Adequately Tested | |
| Atypical antipsychotics medications | <p>Risperidone (Risperdal), quetiapine (Seroquel), olanzapine (Zyprexa), and aripiprazole (Abilify); limited evidence for effectiveness in youth with ID or ASD.</p> |
| Stimulant or atomoxetine | <p>Methylphenidate, d-Amphetamine, atomoxetine; limited evidence when comorbid with primary diagnosis of ADHD.</p> |
| Mood stabilizers | <p>Divalproex sodium, lithium carbonate; limited evidence when comorbid with primary diagnosis of bipolar disorder.</p> |
| Selective serotonin reuptake inhibitors (SSRIs) | <p>Limited evidence when comorbid with primary diagnosis of depressive disorder.</p> |
| What Does Not Work | |
| Boot camps, shock, incarcerations | <p>Ineffective at best; can lead worsening of symptoms.</p> |
| Dramatic, short-term, or talk therapy | <p>Little to no effect as currently studied.</p> |

FIRESETTING, JUVENILE

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | Structured treatments designed to intervene with children who set fires. Because firesetting is a maladaptive behavior, CBT is a reasonable intervention to consider for behavior modification. |
| Fire safety education | Education includes information about the nature of fire, how rapidly it spreads, and its potential for destructiveness, as well as information about how to maintain a fire-safe environment, utilizing escape plans and practice, and the appropriate use of fire. |
| Firefighter home visit | Firefighters visit homes and explain the dangers of playing with fire. |
| What Does Not Work | |
| Ignoring the problem | Leaving youth untreated is not beneficial because they typically do not outgrow this behavior and behavior may increase. |
| Satiation | Satiation, the practice of repetitively lighting and extinguishing fire, may cause the youth to feel more competent around fire and may actually increase the behavior. |
| Burning the juvenile | Burning a juvenile to show the destructive force of fire is illegal and abusive. It will not decrease the likelihood of the juvenile setting fires or treat the problem. |
| Scaring the juvenile | Scare tactics may produce the emotions or stimulate the actions the clinician is trying to prevent, particularly when family or social issues may trigger firesetting. Scare tactics may also trigger defiance, avoidance, or may even increase the likelihood that firesetting traits continue. |

HOARDING DISORDER

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) for hoarding | A multi-component cognitive behavioral treatment designed specifically for hoarding has shown promising results in adults. |
| Not Adequately Tested | |
| Selective serotonin reuptake inhibitors (SSRIs) | Possibly efficacious because of their effectiveness with similar disorders. |

INTELLECTUAL DISABILITY (ID)

| What Works | |
|---|--|
| Behavioral interventions | Behavioral interventions analyze the cause of a negative behavior and how it is being reinforced, and then offer techniques targeted to promoting positive behaviors. |
| Applied behavioral analysis (ABA) | A type of behavioral intervention that uses principles of learning theory to bring about meaningful and positive change in behavior. ABA techniques have been used to help build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring) and help generalize these skills to other situations. |
| Functional communication training (FCT) | An example of a behavioral intervention program that combines the assessment of the communicative functions of problem behavior with ABA procedures to teach alternative responses. Problem behaviors can be eliminated through extinction and replaced with alternate, more appropriate forms of communicating needs or wants. |
| What Seems to Work | |
| Psychotropic medications for co-occurring mental health disorders | Prescribed to treat co-occurring disorders such as anxiety disorders and ADHD. Because these medications have not been studied in ID populations, they should only be used when therapeutic and social measures do not properly address symptoms and in conjunction with appropriate behavioral interventions. |
| Not Adequately Tested | |
| Psychotropic medications to treat challenging behaviors | Psychotropic medications, such as antipsychotics, are sometimes used “off label” to treat challenging behaviors such as aggression. These medications should be used with caution and only when necessary. They should never be used for the convenience of caregivers. |

JUVENILE OFFENDING

| What Works | |
|-------------------------------------|---|
| Multisystemic therapy (MST) | An integrative, family-based treatment with a focus on improving psychosocial functioning for youth and families. |
| Functional family therapy (FFT) | A family-based program that focuses on delinquency, treating maladaptive and “acting out” behaviors, and identifying obtainable changes. |
| Treatment Foster Care Oregon (TFCO) | As an alternative to corrections or residential treatment, TFCO places juvenile offenders with carefully trained foster families who provide youth with close supervision, fair and consistent limits, consequences, and a supportive relationship with an adult. The program includes family therapy for biological parents, skills training and supportive therapy for youth, and school-based behavioral interventions and academic support. |

| What Seems to Work | |
|--------------------------------------|--|
| Family centered treatment (FCT) | FCT seeks to address the causes of parental system breakdown while integrating behavioral change. FCT provides intensive in-home services and is structured into four phases: joining and assessment, restructuring, value change, and generalization. |
| Brief strategic family therapy | A short-term, family-focused therapy that focuses on changing family interactions and contextual factors that lead to behavior problems. |
| Aggression replacement therapy (ART) | A short-term, educational program that focuses on anger management and provides youth with the skills to demonstrate non-aggressive behaviors, decrease antisocial behaviors, and utilize prosocial behaviors. |
| Cognitive behavioral therapy (CBT) | A structured, therapeutic approach that involves teaching youth about the thought-behavior link and working with them to modify their thinking patterns in a way that will lead to more adaptive behavior in challenging situations. |
| Dialectical behavior therapy | A therapeutic approach that includes individual and group therapy components and specifically aims to increase self-esteem and decrease self-injurious behaviors and behaviors that interfere with therapy. |

NONSUICIDAL SELF-INJURY

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | CBT involves providing skills designed to assist youth with affect regulation and problem solving. |
| Dialectical behavior therapy (DBT) | DBT emphasizes acceptance strategies and the development of coping skills. |
| Not Adequately Tested | |
| Problem solving therapy | Designed to improve an individual's ability to cope with stressful life experiences. |
| Medication | Evidence of the effectiveness of the use of medications, such as high-dose SSRIs, atypical neuroleptics, and opiate antagonists, is limited. In addition, some medications have been shown to increase suicidal ideation in children and adolescents. |
| Hospitalization | Because effectiveness is not consistently demonstrated, should be reserved for youth who express intent to die. |

OBSESSIVE-COMPULSIVE DISORDER (OCD)

| What Works | |
|--|--|
| Cognitive behavioral therapy (CBT) with exposure and response prevention (ERP) | Treatment path with a consistent and compelling relationship between the disorder, the treatment, and the specified outcome. Combines training with exposure and preventing the accompanying response. |
| Family-focused individual CBT | Individual CBT that includes a focus on family involvement. It should be noted that the distinction of family focused here is meant to imply a format for treatment delivery. |
| Serotonin reuptake inhibitors (SRIs) | Clomipramine: Approved for children aged ten and older. Recommend periodic electrocardiographic (ECG) monitoring. |
| Selective serotonin reuptake inhibitors (SSRIs) | Fluoxetine (Prozac): Approved for children aged eight and older Sertraline (Zoloft): Approved for children aged six and older Fluvoxamine (Luvox): Approved for children aged eight and older |
| What Seems to Work | |
| Family focused group CBT | Studies show promising results but there have only been a small number of studies. However, each study addresses complex comorbidity and issues impacting community-based treatment. |
| Not Adequately Tested | |
| CBT without ERP Psychodynamic therapy Client-centered therapy | Systematic controlled studies have not been conducted using these approaches. |
| Technology-based CBT | Results show preliminary support for telephone CBT and web-camera CBT. Although these results are encouraging, caution must be taken due to the small sample sizes and lack of active control groups. |
| What Does Not Work | |
| Antibiotic treatments | Antibiotic treatments are only indicated when the presence of an autoimmune or strep-infection has been confirmed and coincided with onset or increased severity of obsessive-compulsive disorder symptoms (PANDAS). |
| Herbal therapies | Herbs, such as St. John's Wort, have not been rigorously tested and are not FDA approved. In some instances, herbal remedies may make symptoms worse or interfere with medications. |

POST-TRAUMATIC STRESS DISORDER (PTSD)

| What Works | |
|--|---|
| Trauma-focused cognitive behavioral therapy (TF-CBT) | Treatment that involves reducing negative emotional and behavioral responses related to trauma by providing psychoeducation on trauma, addressing distorted beliefs and attributes related to trauma, introducing relaxation and stress management techniques, and developing a trauma narrative in a supportive environment. |
| What Seems to Work | |
| Family centered treatment (FCT) trauma treatment | FCT Trauma Treatment provides intensive in-home services and seeks to address the causes of trauma, including parental system breakdown, while integrating behavioral change. |
| School-based group CBT | Similar components to TF-CBT, but in a group, school-based format. |
| Not Adequately Tested | |
| Child-centered play therapy | Therapy that utilizes child-centered play to encourage expression of feelings and healing. |
| Psychological debriefing | An approach in which youth talk about the facts of the trauma (and associated thoughts and feelings) and then are encouraged to re-enter into the present. |
| Medication | Includes treatment with selective serotonin reuptake inhibitors (SSRIs). |
| Resilient peer treatment | Classroom treatment that pairs withdrawn children with resilient peers with a parent present for assistance. |
| Eye movement desensitization and reprocessing therapy (EMDR) | Therapy that utilizes visual and physical memory imagery while the clinician creates visual or auditory stimulus to reduce negative memory and increase positive memory. |
| What Does Not Work | |
| Restrictive rebirthing or holding techniques | Restrictive rebirthing or holding techniques that may forcibly bind or restrict, coerce, or withhold food/water from children and have resulted, in some cases, in death; not recommended. |

SCHIZOPHRENIA

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |

| What Seems to Work | |
|--|--|
| Medication treatment with second-generation (atypical) antipsychotics | Risperidone Aripiprazole Quetiapine Paliperidone Olanzapine |
| Medication treatment with traditional neuroleptics/first generation antipsychotics | Molindone Haloperidol |
| Family psychoeducation and support | Helps to improve family functioning, problem solving and communication skills, and decrease relapse rates. |
| Cognitive behavioral therapy (CBT) | Includes social skills training, problem-solving strategies, and self-help skills. |
| Cognitive remediation | Pointed tasks to help improve specific deficiencies in cognitive, emotional, or social aspects of a patient's life. |
| Not Adequately Tested | |
| Electroconvulsive therapy (ECT) | Small electric currents are passed through the brain, intentionally triggering a brief seizure to reverse symptoms of certain mental illnesses. Unproven as effective in youth. Should only be used as a last effort after all risks are weighted against possible benefits. |
| What Does Not Work | |
| Psychodynamic therapies | Talk therapies that focus on a client's self-awareness and understanding of the influence of the past on present behavior. These therapies are considered to be potentially harmful for youth with schizophrenia. |

SEXUAL OFFENDING

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Multisystemic therapy for problem sexual behaviors (MST-PSB) | An intensive family- and community-based treatment that addresses the multiple factors of serious antisocial behavior in juvenile sexual abusers. |
| Cognitive behavioral therapy (CBT); Children with problematic sexual behavior CBT (PBS-CBT) | Treatment modalities that provide cognitive-behavioral, psychoeducational, and supportive services. |

Not Adequately Tested

| | |
|------------|--|
| Medication | There is no research validation for the use of medication targeting sexually deviant behavior in youth and only limited methodologically sound research to guide in the treatment of adults. |
|------------|--|

STEREOTYPIC MOVEMENT DISORDER**What Works**

| | |
|------------------------------|--|
| Habit reversal therapy (HRT) | Increases awareness to the feelings and context associated with the stereotypes and implements competing and inconspicuous habits in their place. HRT can be modified to include rewards, relaxation, education, self-awareness, and situational changes. It is sometimes combined with other therapies. |
|------------------------------|--|

What Seems to Work

| | |
|------------|---|
| Medication | Medications may be considered for moderate to severe stereotypies causing severe impairment in quality of life or when co-occurring conditions that would also benefit from the medication are present. |
|------------|---|

SUBSTANCE USE DISORDERS**What Works**

| | |
|---|--|
| Cognitive behavioral therapy (CBT) | A structured therapeutic approach that involves teaching youth about the thought-behavior link and working with them to modify their thinking patterns in a way that will lead to more adaptive behavior in challenging situations. |
| Family therapy Multidimensional family therapy (MDFT) Functional family therapy (FFT) | Family-based therapy is aimed at providing education, improving communication and functioning among family members, and reestablishing parental influence through parent management training. MDFT views drug use in terms of networks of influences (individual, family, peer, community) and encourages treatment across settings in multiple ways. FFT is best used in youth with conduct and delinquent behaviors along with substance use disorders combining relationship with CBT interventions to change relationship patterns and improve the family's functioning. |
| Multisystemic therapy (MST) | An integrative, family-based treatment with a focus on improving psychosocial functioning for youth and families. |

What Seems to Work

| | |
|--|--|
| Behavioral therapies | Behavioral therapies focus on identifying specific problems and areas of deficit and working on improving these behaviors. |
| Motivational interviewing (MI) Motivational enhancement therapy (MET) | MI is a brief treatment approach aimed at increasing motivation for behavior change. It is focused on expressing empathy, avoiding argumentation, rolling with resistance, and supporting self-efficacy. MET is an adaptation of MI that includes one or more client feedback sessions in which normative feedback is presented and discussed. |

| | |
|--|--|
| Medication | Some medication can be used for detoxification purposes, as directed by a doctor. Medication may also be used to treat co-existing mental health disorders. |
| Not Adequately Tested | |
| Multifamily educational intervention (MEI) | MEI combines psycho-educational and family interventions for troubled adolescents and their families. |
| Adolescent group therapy (AGT) | The AGT intervention incorporates adolescent therapy groups on stress management, developing social skills, and building group social support. |
| Interpersonal and psychodynamic therapies | Interpersonal and psychodynamic therapies are methods of individual counseling that are often incorporated into the treatment plan and focus on unconscious psychological conflicts, distortions, and faulty learning. |
| Client-centered therapies | A type of therapy focused on creating a non-judgmental environment, such that the therapist provides empathy and unconditional positive regard. This facilitates change and solution making on behalf of the youth. |
| Psychoeducation | Programs aimed at educating youth on substance use and may cover topics like peer pressure and consequences of substance use. |
| Project CARE | A program aimed at raising awareness about chemical dependency among youth through education and training. |
| Twelve-step programs | A twelve-step program that uses the steps of Alcoholics Anonymous as principles for recovery and treating addictive behaviors. |
| Process groups | A type of psychotherapy that is conducted in a small group setting. Groups can be specialized for specific purposes and therapy utilizes the group as a mechanism of change. |
| Neurofeedback | A type of non-invasive brain training that enables an individual to learn how to change mental and/or physiological activity. |

SUICIDE, YOUTH

| | |
|--|--|
| What Works | |
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Selective serotonin reuptake inhibitors (SSRIs) | These antidepressants may help reduce suicidal ideation; however, in some individuals they may cause suicidal ideation. Youth taking SSRIs must be closely monitored. |
| Cognitive behavioral therapy (CBT) Dialectical behavior therapy (DBT) | These psychotherapies have both shown promise in reducing suicidal ideation in some youth when paired with appropriate medication therapy. Other psychotherapies, such as interpersonal therapy for adolescents, psychodynamic therapy, and family therapy, may also be effective. |

| | |
|---|---|
| SOS (signs of suicide) prevention program | A school-based education and screening program that teaches students to recognize warning signs of depression and suicidality in themselves or their peers. |
| Not Adequately Tested | |
| Gatekeeper training | Involves educating youth, parents, and caregivers in warning signs of suicide to encourage early intervention. |
| What Does Not Work | |
| Tricyclic antidepressants | Not recommended; effectiveness has not been demonstrated, and older tricyclic antidepressants are lethal in overdose quantities. |
| No-suicide contracts | Designed as an assessment tool, not a prevention tool. Studies on effectiveness in reducing suicide are inconclusive and their use is discouraged, as they may be interpreted as being coercive or may encourage suicide in some individuals. |

TIC DISORDERS

| | |
|--|---|
| What Works | |
| Habit reversal therapy (HRT) for tic disorder | A type of cognitive behavioral therapy. HRT for tic disorders increases awareness to the feelings and context associated with the urge to tic and implements competing and inconspicuous habits in its place. |
| Comprehensive behavioral intervention for tics (C-BIT) | Combines HRT and other approaches like education, awareness via self-monitoring, relaxation techniques, and sometimes situational changes. |
| What Seems to Work | |
| Exposure with response prevention (ERP) | Consists of repeated, prolonged exposures to stimuli that elicit discomfort and instructions to refrain from any behavior that serves to reduce discomfort. |
| Medication | Medications may be considered for moderate to severe tics causing severe impairment in quality of life or when co-occurring conditions that would also benefit from the medication are present. |
| Massed negative practice | Treatment involves children's over-rehearsal of target tic in high-risk situations. |
| What Does Not Work | |
| Deep brain stimulation | Surgical intervention; not recommended. |
| Repetitive transcranial magnetic stimulation (rTMS) | Safety in youth has not been established; not recommended. |

| | |
|--|---|
| Plasma exchange; Intravenous immunoglobulin (IVIG) treatment | Blood transfusions alter levels of plasma or immunoglobulin. While several of these treatments have been shown to be promising, they are not empirically supported and not recommended. |
| Dietary supplements (magnesium and vitamin B6); special diets | Supplements may have the potential to negatively interact with other medications. Not recommended until safety in children is established. |

TRICHOTILLOMANIA (HAIR PULLING) AND EXCORIATION (SKIN PICKING) DISORDER

What Works

There are no evidence-based practices at this time.

What Seems to Work

| | |
|---------------------------------------|---|
| Habit reversal therapy (HRT) | Treatment increases awareness to the feelings and context associated with the urges and implements a competing and inconspicuous habit in place of the hair pulling and skin picking. |
| Cognitive behavioral therapy (CBT) | Treatment involves exposing children to the stimuli associated with the urge, while challenging thoughts associated with high-risk situations. |

Not Adequately Tested

| | |
|---|--|
| Selective serotonin reuptake inhibitors (SSRIs) N-acetylcysteine Naltrexone | Some demonstrated improvement on certain measures of picking behavior has been demonstrated in some pharmacological studies of adults. |
|---|--|



INTRODUCTION TO NEURODEVELOPMENTAL DISORDERS

In the 2013, the American Psychiatric Association (APA) released the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). In the DSM-5, the section, “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence” was replaced with a new section, “Neurodevelopmental Disorders.”

According to the APA, neurodevelopmental disorders are a group of conditions with onset in the developmental period. The disorders typically manifest early in development, often before the child enters grade school, and are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning. The range of developmental deficits varies from very specific limitations of learning or control of executive functions to global impairments of social skills or intelligence.

Neurodevelopmental disorders included in the *Collection* are:

- Intellectual Disability
- Autism Spectrum Disorder
- Attention-Deficit/Hyperactivity Disorder
- Motor Disorders

Co-Occurring Disorders (Dual Diagnosis)

Neurodevelopmental disorders frequently co-occur. For example, individuals with autism spectrum disorder may have intellectual disability, and children with attention-deficit/hyperactivity disorder (ADHD) may also have a specific learning disorder.

In addition, youth with a neurodevelopmental disorder may also have a diagnosable mental health disorder. Unfortunately, symptoms of mental health disorders are sometimes attributed to the primary neurodevelopmental disorder. Clinicians who do not recognize the possibility of dual diagnosis may leave mental health issues untreated and exacerbate symptoms. A dual diagnosis may cause significant clinical impairment, placing additional challenges on youth with developmental disorders and their families and greatly reduce quality of life. For this reason, it is important that accurate diagnosis and appropriate treatment be obtained.

Service providers may use structured or semi-structured tools developed for individuals with neurodevelopmental disorders to improve the accuracy of the mental health diagnosis. A full psychiatric/behavioral assessment is a critical step to help accurately diagnose a co-occurring mental health disorder.



INTELLECTUAL DISABILITY

OVERVIEW

Intellectual disability (ID) is a neurodevelopmental disorder characterized by significant limitations in both intellectual functioning and adaptive behaviors. Intellectual functioning—also called intelligence—refers to general mental capacity, such as learning, reasoning, and problem solving. Adaptive behaviors are conceptual, social, and practical skills, such as using concepts like numbers and time, developing interpersonal skills, and managing day-to-day activities. In order for a youth to be diagnosed with an intellectual disability, he or she must have an onset of symptoms during the developmental period, have an IQ significantly below average (usually 70 or below), and have significant deficits in adaptive functioning.

A multidisciplinary team, which may include psychologists, psychiatrists, pediatricians, and clinical geneticists, should conduct the assessment for intellectual disability. Assessments should include standardized testing of intellectual ability, adaptive behavior, and adaptive function, and a detailed family and medical history evaluation. In addition, the team should evaluate a youth's overall physical and intellectual strengths and weaknesses and create a tailored plan to help the child be fully included in all facets of community life.

KEY POINTS

- Characterized by early onset of symptoms in developmental period, below average IQ, and deficits in adaptive functioning.
- 32 to 40 percent of children with ID also have a co-occurring mental health disorder (known as dual diagnosis).
- Effective intervention has the goal of improving quality of life.
- Behavioral interventions have the most evidence-based support.

Intellectual Disability and Co-occurring Mental Health Disorders (Dual Diagnosis)

It is estimated that between 32 and 40 percent of all individuals with intellectual disability also have a diagnosable mental health disorder.¹ This is known as a dual diagnosis. While most professionals understand dual diagnosis to describe those who suffer from both mental health disorders and substance abuse, the term is also used for those with the double challenge of intellectual disability and a mental health disorder. A dual diagnosis may cause significant clinical impairment in youth with intellectual disability and result in additional challenges for these youth and their families. Unfortunately, it is frequently assumed that behaviors associated with co-occurring disorders are related to the intellectual disability. Holding to this assumption can leave mental

¹ Aggarwal, R., Guanci, N., & Appareddy, V. L. (2013). Issues in treating patients with intellectual disabilities. *Psychiatric Times*. Retrieved from <http://www.psychiatrictimes.com/special-reports/issues-treating-patients-intellectual-disabilities>

health issues untreated and exacerbate symptoms. Table 1 lists mental health disorders that commonly co-occur with ID and their prevalence rates.

Table 1
Prevalence of Co-occurring Mental Health/Neurodevelopmental Disorders Among Children and Adolescents with and without Intellectual Disability

| Co-occurring Disorder | Prevalence Rates by Percentage | |
|---|--------------------------------|---------------------------------|
| | With Intellectual Disability | Without Intellectual Disability |
| Any psychiatric disorder | 36.0 | 8.0 |
| Any emotional disorder | 12.0 | 3.7 |
| Any anxiety disorder | 11.4 | 3.2 |
| Any depressive disorder | 1.4 | 0.9 |
| Attention-deficit/hyperactivity disorder (ADHD) | 8.3 | 0.9 |
| Any conduct disorder | 20.5 | 4.3 |
| Autism spectrum disorder | 8.0 | 0.3 |
| Tic disorder | 0.8 | 0.2 |
| Eating disorder | 0.2 | 0.1 |
| Emotional disorder & conduct disorder | 4.4 | 0.8 |
| Conduct disorder & ADHD | 5.8 | 0.6 |
| Emotional disorder & ADHD | 1.3 | 0.1 |
| Emotional disorder & conduct disorder & ADHD | 0.8 | 0.1 |

Source: Emerson, E., & Hatton, C. (2007). Mental health of children and adolescents with intellectual disabilities in Britain. *The British Journal of Psychiatry*, 191, 493-499.

CAUSES AND RISK FACTORS

Knowledge of the causes of intellectual disability in a particular case is important because the cause may be associated with a particular “behavioral phenotype” or increased risk for a medical disorder. Doctors can find a specific reason for an intellectual disability in 25 percent of cases. The following are risk factors associated with the development of intellectual disability:

- Infections (present before or shortly after birth)
- Chromosomal abnormalities (e.g., Down syndrome)
- Environmental factors
- Nutritional (e.g., malnutrition)
- Toxic exposure (e.g., exposure to alcohol, cocaine, amphetamines, or other drugs)
- Trauma (present before or shortly after birth)

INTERVENTIONS

Children with intellectual disability have the ability to lead meaningful lives if they are provided the education and supports needed to be successful. Effective interventions should contribute to improving quality of life. The most widely utilized and investigated interventions are behavioral interventions, psychopharmacological interventions, and environmentally mediated interventions, which include developmental and educational services. Individual, group, and/or family psychotherapy may also be included in the intervention plan. Verbal psychotherapies are most appropriate for persons with mild to moderate intellectual disability. Table 2 summarizes interventions for youth with intellectual disability.

Table 2
Summary of Interventions for Youth with Intellectual Disability

| What Works | |
|---|--|
| Behavioral interventions | Behavioral interventions analyze the cause of a negative behavior and how it is being reinforced, and then offer techniques targeted to promoting positive behaviors. |
| Applied behavioral analysis (ABA) | A type of behavioral intervention that uses principles of learning theory to bring about meaningful and positive change in behavior. ABA techniques have been used to help build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring) and help generalize these skills to other situations. |
| Functional communication training (FCT) | An example of a behavioral intervention program that combines the assessment of the communicative functions of problem behavior with ABA procedures to teach alternative responses. Problem behaviors can be eliminated through extinction and replaced with alternate, more appropriate forms of communicating needs or wants. |
| What Seems to Work | |
| Psychotropic medications for co-occurring mental health disorders | Prescribed to treat co-occurring disorders such as anxiety disorders and ADHD. Because these medications have not been studied in ID populations, they should only be used when therapeutic and social measures do not properly address symptoms and in conjunction with appropriate behavioral interventions. |
| Not Adequately Tested | |
| Psychotropic medications to treat challenging behaviors | Psychotropic medications are sometimes used “off label” to treat challenging behaviors such as aggression. These medications should be used with caution and only when necessary. They should never be used for the convenience of caregivers. |

Behavioral Interventions

Behavioral interventions are designed to provide alternatives to unwanted behaviors. These interventions analyze the cause of the behavior and how it is being reinforced. Techniques such as functional communication training (e.g., learning how to request breaks), noncontingent reinforcement (i.e., reinforcement delivered on a fixed time schedule), and extinction are used to reduce challenging behaviors (e.g., aggression, self-injury, task-avoidance) and to promote positive behaviors. Behavioral techniques target skills, deficits, and modifications to the environment and are most effective if applied across multiple settings to promote generalization of skills.

There are many simple behavioral techniques that can be helpful in attempting to ease the transition of an individual with intellectual disability into the general public, such as setting boundaries, creating positive reinforcement of desired behaviors, and creating activity schedules.

Applied Behavioral Analysis (ABA)

Also known as *early intensive behavioral intervention* and *comprehensive behavioral treatment for young children*, applied behavioral analysis is a type of behavioral intervention that uses principles of learning theory to bring about meaningful and positive change in behavior. ABA techniques have been used to help build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring) and help generalize these skills to other situations. The techniques can be used in both structured (e.g., classroom) and everyday (e.g., family dinner time) settings and in one-on-one or group instruction. ABA is also used with individuals with ID who have autism spectrum disorder. Intervention is customized based on the individual's needs, interests, and family situation. ABA techniques are often used in intensive, early intervention (before age four) programs to address a full range of life skills.

Functional Communication Training (FCT)

FCT is one example of a behavioral intervention program that combines the assessment of the communicative functions of problem behavior with ABA procedures to teach alternative responses. Problem behaviors can be eliminated through extinction and replaced with alternate, more appropriate forms of communicating needs or wants. FCT can be used across a range of ages and regardless of cognitive level or expressive communication abilities.

Pharmacological Interventions

There are no pharmacological treatments available for intellectual disability. For this reason, psychotropic drugs should only be used to target co-occurring mental health disorders, and only when therapeutic and social measures do not properly address symptoms.

Reports of the prevalence of psychotropic medication use in both adults and children with intellectual disability show that over one-third of this population served in residential settings is receiving at least one psychotropic drug. Psychotropic medications are also used “off-label” for the treatment of challenging behaviors, such as aggression and behavioral disturbance. The literature repeatedly advises that medication should not be used for the convenience of caregivers or as a substitute for appropriate services.

Pharmacological Interventions in Dual Diagnosis

For people with intellectual disabilities, medication is appropriate when there is a dual diagnosis of a psychiatric disorders, such as a mood disorder or a psychotic disorder. Medication treatment should not be a total treatment approach but rather be part of a comprehensive bio-psycho-social-developmental treatment approach. In addition, treating ADHD with medication is contraindicated in youth with IQs less than 50, as pharmacological treatment can cause serious side effects such as tics, social withdrawal, irritability, and anxiety. Table 3 outlines some of the different pharmacological approaches and the different comorbid symptoms that each drug treats for individuals with intellectual disability.

Table 3
Pharmacological Treatments and Their Side Effects

| Drug | Targeted Symptoms | Potential Side Effects |
|---|--|---|
| Risperidone | Hyperactivity, irritability, aggression, and impulsivity | Hyperprolactinemia, weight gain, somnolence, and headaches |
| Quetiapine | Aggression and hyperactivity | Sedation, weight gain, and paradoxical agitation |
| Ziprasidone | Aggression and irritability | Dizziness, fever, and fast/uneven heartbeat |
| Stimulants and nonstimulant atomoxetine | Symptoms of ADHD | In persons with an IQ less than 50, can cause tics, social withdrawal, irritability, anxiety, and anorexia |
| Fluoxetine | Stereotypic and self-injurious behaviors | Restlessness, hyperactivity, agitation, decreased appetite, insomnia |
| Valproic acid | Aggression and self-injurious behavior | Hepatic failure, pancreatitis, thrombocytopenia, development of ovarian cysts, obesity, irregular menses, increased hair growth, sedation, GI upset, tremor, alopecia |

Source: Aggarwal, R., Guanci, N., & Appareddy, V. L. (2013). Issues in treating patients with intellectual disabilities. *Psychiatric Times*. Retrieved from <http://www.psychiatrictimes.com/special-reports/issues-treating-patients-intellectual-disabilities>

SPECIAL EDUCATIONAL SERVICES IN VIRGINIA

The Individuals with Disabilities in Education Act (IDEA), Part B, requires that eligible children with disabilities receive a free and appropriate education (FAPE) from ages 2-22.

In Virginia, Part B preschool services are available to eligible children with disabilities from age two to age five. While IDEA mandates that such services be available starting at age three, Virginia parents have the option of either IDEA Part B preschool or IDEA Part C early intervention services for their child between the ages of two and three. A separate eligibility determination is required for Part B services from that required for Part C.

Early intervention services under Part C are based on a multi-disciplinary evaluation and each state develops its own definition of eligibility. In Virginia, children from birth to age three are eligible for Part C early intervention services if the child:

- Has a 25 percent developmental delay in one or more areas of development,
- Has atypical development, or
- Is diagnosed with a physical or mental condition that has a high probability of resulting in a developmental delay.

In Virginia, the Virginia Department of Behavioral Health and Developmental Services (VDBHDS) is the lead agency that administers Part C of IDEA. Virginia's statewide early intervention system is called the Infant & Toddler Connection of Virginia. Infant and toddler services can be home-based, center-based, or a combination. To the maximum extent possible, services are to be provided in the child's natural environment.

The nature of the services is determined based on an assessment of the child and the family priorities. The services that are provided in response to this plan may include the identification of appropriate assistive technology, intervention for sensory impairments, family counseling, parent training, health services, language services, health intervention, occupational therapy, physical therapy, speech therapy, case management, and transportation to services. Part C services are provided on a sliding fee scale.

Pursuant to IDEA, special education is defined as specially designed instruction, offered at no cost to the parent(s), that meets the unique needs of a child with a disability, including instruction conducted in a classroom, in the home, in hospitals, in institutions, and in other settings, and instruction in physical education. According to IDEA, "specially designed instruction" means adapting, as appropriate to the needs of an eligible child, the content, methodology, or delivery of instruction a) to address the unique needs of the child that result from the child's disability; and b) to ensure the child's access to the general curriculum, so the child can meet the educational standards that apply to all children within the jurisdiction of the public school division.

There are numerous students with disabilities who do not require special education services through an Individualized Education Program (IEP) but may need accommodations to be successful. Examples of accommodations include: giving a student preferential seating, allowing more time for tests, having certain tests read aloud, allowing the use of a calculator, and so forth.

These students may be eligible for a 504 plan under Section 4 of the amended Rehabilitation Act of 1973. The 504 plan is generally developed by a committee consisting of the student with the disability, if appropriate; one or more of the student's parents or guardians; one or more of the student's teachers; and the school's 504 coordinator. A 504 plan, which must be updated annually, documents the student's disability, his or her need for accommodations, and the set of specific accommodations that will be provided by the school.

VIRGINIA'S HOME AND COMMUNITY-BASED MEDICAID WAIVERS

In Virginia, individuals with an intellectual disability may be eligible to receive services from Virginia's Home and Community-Based (HCBS) Medicaid Waivers. Medicaid HCBS waivers provide opportunities for individuals eligible for an institutional level of care to receive services in their own home or community rather than an institutional setting. Eligible individuals are screened for the waiver by their local community services board. If the child is found eligible for the waiver, the parent would "waive" the child's right to receive services in an institution and choose instead to receive services in the community. Virginia's four HCBS Waiver programs are described in Table 4. More information about Developmental Disability (DD) Waivers can be found on the DBHDS website.

Table 4
Medicaid Waiver Program in Virginia

| Waiver | Description |
|---|---|
| Developmental Disability (DD) Waivers | |
| Community Living Waiver (formerly ID Waiver) | Includes residential supports and a full array of medical, behavioral, and non-medical supports. Available to adults and children. May include 24/7 supports for individuals with complex medical and/or behavioral support needs through licensed services. |
| Family & Individual Supports Waiver (formerly DD Waiver) | Provides supports for individuals living with their families, friends, or in their own homes, including supports for those with some medical or behavioral needs. Available to both children and adults. |
| Building Independence Waiver (formerly Day Support Waiver) | Supports adults (18+) to live independently in the community. Individuals own, lease, or control their own living arrangements and supports are complemented by nonwaiver-funded rent subsidies. |
| CCC Plus Waiver (formerly EDCD Waiver/Tech Waiver) | CCC Plus is a new statewide Medicaid managed care program. The CCC Plus Waiver is the community alternative to a nursing facility placement. Individuals on a DD Waiver receive their acute and primary care medical services through CCC Plus. CCC Plus Waiver service may be used while on a wait list for a DD Waiver. |

Source: Virginia Department of Behavioral Health and Developmental Services

RESOURCES AND ORGANIZATIONS

American Association of Intellectual and Development Disabilities

<http://aaidd.org/>

Behavioral Supports

<https://aaidd.org/news-policy/policy/position-statements/behavioral-supports>

American Speech-Language-Hearing Association

Intellectual Disability

<https://www.asha.org/Practice-Portal/Clinical-Topics/Intellectual-Disability/>

Center for Excellence in Developmental Disabilities

<https://health.ucdavis.edu/mindinstitute/centers/cedd.html>

Center for Parent Information and Resources

<http://www.parentcenterhub.org/>

Council for Exceptional Children

Division on Developmental Disabilities

<http://www.dddcec.org/>

Individuals with Disabilities Education Act (IDEA)

<http://idea.ed.gov/>

National Association of the Dually Diagnosed (NADD)

<http://thenadd.org/about-nadd/>

National Down Syndrome Society (NDSS)

<http://www.ndss.org/>

National Fragile X Foundation

<https://fragilex.org/>

National Organization on Fetal Alcohol Syndrome

<https://www.nofas.org/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

U.S. Department of Education

Office of Special Education and Rehabilitative Services

<https://www2.ed.gov/about/offices/list/osers/index.html?exp=5>

U.S. Department of Health and Human Services

Administration for Children and Families

<https://www.acf.hhs.gov/>

U.S. Department of Health and Human Services

Administration for Community Living

<https://www.acl.gov>

The Arc of the United States

<http://www.thearc.org/>

Webinar: Effective Behavior Strategies for Children with Intellectual/Developmental Disabilities

<https://www.aucd.org/docs/webinars/Aug22/MHWebinar.pdf>

VIRGINIA RESOURCES AND ORGANIZATIONS

Partnership for People with Disabilities at Virginia Commonwealth University

<https://partnership.vcu.edu/>

Virginia Board for People with Disabilities

<https://www.vaboard.org/>

Virginia Department of Behavioral Health and Developmental Services (DBHDS)

<http://www.dbhds.virginia.gov/>

Medicaid Waiver information:

https://csa.virginia.gov/Content/doc/DMAS_Program_Changes_Learning_the_New_DD_Waivers_and_the_CCC_Plus_Waiver_2018.pdf

Infant and Toddler Connection of VA

<http://www.infantva.org/>

Virginia Department of Education

Office of Special Education

http://www.doe.virginia.gov/special_ed/index.shtml

Virginia Office for Protection and Advocacy

disABILITY Law Center

<http://dlcv.org/>

The Arc of Virginia

<https://thearcofva.org/>



AUTISM SPECTRUM DISORDER

OVERVIEW

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental disability that is typically diagnosed during childhood. According to the American Psychiatric Association (APA), the disorder is marked by two main characteristics: 1) persistent deficits in social communication and social interaction; and 2) restricted, repetitive behaviors, interests, and activities. Symptoms and characteristics of ASD are varied, both in scope and severity. For instance, social communication and interaction deficits can include responding inappropriately in conversations, misreading nonverbal interactions, or having difficulty building age-appropriate friendships. Behavioral characteristics can include an overdependence on routines, high sensitivity to changes in environment, or inappropriate focus. In addition, for an individual to be diagnosed with ASD, symptoms must be present in some form in the early developmental period, must cause clinically significant impairment in the individual's daily life, and cannot be explained by another disorder.

ASD is characterized as a spectrum because there is a great range of abilities and traits found in youth diagnosed with this disorder. Some children are very bright and do well in school, although they may have problems with school adjustment or require special education or related services. Other children may have more significant challenges, including cognitive, psychological, and behavioral challenges. The severity of ASD also varies widely, from mild to severe. Many people with mild forms of the disorder can live independently when they are adults, have careers, get married, have children, and are productive members of society, while those with more severe forms of the disorder may need lifelong supportive interventions.

Figure 1 describes some common characteristics of ASD, as reported by the Centers for Disease Control and Prevention. It is important to note that these characteristics are not necessarily common to all people with ASD.

KEY POINTS

- Main characteristics include:
 - Difficulty relating to and communicating with others; and
 - Restricted, repetitive behaviors, interests, and activities.
- Children with ASD have great range of abilities and traits.
- 70 percent of children with ASD also have a co-occurring mental health disorder.
- Early detection and intervention is critical.
- Behavioral and cognitive-behavioral interventions provide the best outcomes.

Figure 1
Some Characteristics of Youth with ASD

Youth with ASD might:

- Not point at objects to show interest (for example, not point at an airplane flying over)
- Not look at objects when another person points at them
- Have trouble relating to others or not have an interest in other people at all
- Avoid eye contact and want to be alone
- Have trouble understanding other people's feelings or talking about their own feelings
- Prefer not to be held or cuddled, or might cuddle only when they want to
- Appear to be unaware when people talk to them, but respond to other sounds
- Be very interested in people, but not know how to talk, play, or relate to them
- Repeat or echo words or phrases said to them, or repeat words or phrases in place of normal language
- Have trouble expressing their needs using typical words or motions
- Not play "pretend" games (for example, not pretend to "feed" a doll)
- Repeat actions over and over again
- Have trouble adapting when a routine changes
- Have unusual reactions to the way things smell, taste, look, feel, or sound
- Lose skills they once had (for example, stop saying words they were using)

Source: Centers for Disease Control and Prevention, <https://www.cdc.gov/ncbddd/autism/signs.html>

Signs, Screening, and Assessment

ASD is often discovered when parents become concerned that their child is not developing in the manner expected or achieving typical developmental milestones.¹ Challenges with social interaction, processing, sensory disturbances, communication, and behavior may be among the characteristics noticed by parents that would indicate the need for further evaluation.

The National Institute of Health developed a list of some of the most noticeable signs that suggest a child may need further evaluation for ASD, which are presented in Table 1. It is important to note that these signs are not necessarily common to all people with ASD. In addition, some of these signs apply only at certain ages, some are more strongly associated with ASD than others, and some are very rare.

Many health professionals screen children for ASD during routine healthcare visits, but parents should request a screening if they notice concerning warning signs or characteristics. Screening is not a diagnosis; it simply indicates that the child should receive a comprehensive evaluation for ASD.

¹ For more information about typical developmental milestones, refer to the Centers for Disease Control and Prevention website at <https://www.cdc.gov/ncbddd/actearly/milestones-app.html>

Table 1
Some "Signs" That Indicate That a Child Should Be Screened for ASD

| Domain | Signs and Symptoms Commonly Noted by Caregivers |
|---------------------------|--|
| Social Differences | <ul style="list-style-type: none"> • Doesn't smile when smiled at • Has poor eye contact • Seems to prefer to play alone • Gets things for him/herself only • Is very independent for his/her age • Seems to be in his/her "own world" • Seems to tune people out • Is not interested in other children • Doesn't point out interesting objects by 14 months of age • Doesn't like to play "peek-a-boo" • Doesn't try to attract his/her parent's attention |
| Communication Differences | <ul style="list-style-type: none"> • Does not respond to his/her name by 12 months of age • Cannot explain what he/she wants • Doesn't follow directions • Seems to hear sometimes, but not other times • Doesn't point or wave "bye-bye" • Used to say a few words or babble, but now does not |
| Behavioral Differences | <ul style="list-style-type: none"> • Gets "stuck" doing the same things over and over and can't move on to other things • Shows unusual attachments to toys, objects, or routines (for example, always holding a string or having to put on socks before pants) • Spends a lot of time lining things up or putting things in a certain order • Repeats words or phrases over and over |

Source: National Institutes of Health, <https://www.nichd.nih.gov/health/topics/autism/conditioninfo/symptoms>

Depending on where an individual resides and the resources available to them, a diagnosis may be made by an individual clinician or more preferably by a multi-disciplinary team. Such a team may include a developmental pediatrician, a neurologist, a neuropsychologist, a speech/language therapist, a learning consultant, an occupational therapist, and/or other professionals who are knowledgeable about ASD. Comprehensive evaluation is important to distinguish ASD from other neurodevelopmental or mental health disorders, which may be mistaken for, or co-occur with, ASD.

Co-Occurring Disorders and Conditions

According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), approximately 70 percent of individuals with ASD may have one co-occurring mental disorder, and 40 percent may have two or more co-occurring disorders. Unfortunately, it is frequently assumed that behaviors associated with co-occurring mental health disorders are related to the ASD diagnosis. This assumption can leave mental health issues untreated and

exacerbate symptoms. For this reason, accurate, reliable diagnosis of co-occurring mental health disorders is critical. Table 2 lists disorders that commonly co-occur with ASD.

Table 2
Disorders and Conditions that Commonly Co-Occur with ASD

| Category | Co-occurring Disorder or Condition |
|------------------------------|---|
| Neurodevelopmental disorders | <ul style="list-style-type: none"> • Intellectual Disability • Language Disorder • Attention-Deficit/Hyperactivity Disorder (ADHD) • Motor Disorders |
| Psychological disorders | <ul style="list-style-type: none"> • Obsessive-Compulsive and Related Disorders (OCD) • Anxiety Disorders (including social phobia and specific fears or phobias) • Depressive Disorders • Trauma- and Stressor-Related Disorders |
| Medical conditions | <ul style="list-style-type: none"> • Epilepsy • Sleep Disorders • Constipation or other digestive disorders |
| Other conditions | <ul style="list-style-type: none"> • Hyperactivity • Obsessive-compulsive behaviors • Self-injury • Aggression • Stereotypies (repetitive or ritualistic movements, postures, or utterances), tics, and affective symptoms • Extreme and limited food preferences |

Causes and Risk Factors

Although the causes of ASD are not yet known, it has been established that ASD is not caused by any psychological factors. The high recurrence risk for ASD in siblings and identical twins has provided strong support for the importance of genetic factors. In recent years, there has been a focus on searching for environmental causal factors. The DSM-5 states that a variety of risk factors, such as advanced parental age, low birth weight, or fetal exposure to valproate (an anticonvulsant and mood stabilizer used to treat seizures and bipolar disorder and to help prevent migraine headaches), may contribute to the risk of ASD. Pre- and peri-natal maternal infections and birth complications associated with ASD have also been reported.

There has also been concerns among caregivers on a possible association between childhood immunizations and ASD. However, numerous scientific studies have definitely shown that vaccines do not cause or contribute to the development of ASD. For more information on this subject, see the *Collection, 6th Edition*.

GENERAL PRINCIPLES FOR INTERVENTION

Serving a child with ASD is determined by the child's individual needs. A combination of three principles can improve outcomes for youth with ASD, lessen challenging behavior, and provide the child with maximum independence. These are highlighted in the paragraphs that follow.

Early Intervention

Evidence from various diagnosis and intervention research suggests that early detection of ASD is key to improving developmental outcomes. Early detection leads to early intervention, and for youth with ASD, early participation in specialized intervention programs can optimize long-term outcomes. Evidence has shown that both younger age and more intervention hours positively affect developmental rates, and that some young children with ASD who receive early intervention show significant improvements in cognitive, social, and language functioning as compared to older children who undergo the same interventions.

Family Centered Approach

A multi-disciplinary and family focused approach, in which the service providers and the parents work in a collaborative manner to develop appropriate interventions for the child, is considered the most effective method of service delivery for children with ASD and their families. A family centered approach employs the expertise of the family regarding the strengths and needs of the child.

Educational Intervention

Children with ASD often have behavioral and communication challenges that interfere with learning. Therefore, many benefit from an Individualized Education Program (IEP), as provided for under Part B of the Individuals with Disabilities Education Act (IDEA). Children with a disability from birth through age three are also eligible for early intervention services under Part C of IDEA. In Virginia, parents with children between ages two and three can choose for their child to stay in Part C, early intervention services, or transition to Part B special education services.

Infant/toddler services under Part C of IDEA can be home-based, center-based, or a combination. The nature of the services is determined based on an assessment of the child and the family's priorities. The services provided in response to this plan may include the identification of appropriate assistive technology, intervention for sensory impairments, family counseling, parent training, health services, language services, health intervention, occupational therapy, physical therapy, case management, and transportation to services.

In Virginia, the Department of Behavioral Health and Developmental Services (DBHDS) is the lead agency that administers Part C of IDEA. Virginia's statewide early intervention system is called the Infant & Toddler Connection of Virginia. In Virginia, children from birth to age three are eligible for Part C services:

- If they have a 25-percent developmental delay in one or more areas of development;
- If they have atypical development; or
- If they are diagnosed with a physical or mental condition that has a high probability of resulting in a developmental delay.

Once the child reaches the age of two, special education programs established by Part B of IDEA are available to eligible children. An IEP is developed based on team evaluation and parental input. This plan provides for academic, communication, social, and other learning objectives for the child to obtain within the school year. Extended year services may be available to students who require year round services to prevent skill regression. Students with disabilities, including ASD, are required to be educated in the least restrictive environment appropriate to their needs, which would be in the general education classroom with appropriate supports. However, there is a continuum of placements that also includes special classes, special schools, home instruction, and instruction in hospitals and institutions.

VIRGINIA'S MEDICAID HOME AND COMMUNITY-BASED SERVICES (HCBS) WAIVERS

In Virginia, individuals with ASD may be eligible to receive services via Medicaid HCBS waivers. Medicaid HCBS waivers provide opportunities for individuals eligible for an institutional level of care to receive services in their own home or community rather than an institutional setting. Eligible individuals are screened for the waiver by their local Community Services Board. If the child is found eligible for the waiver, the parent would “waive” the child’s right to receive services in an institution and choose instead to receive services in the community. Virginia’s four HCBS waiver programs are described in Table 3. More information about Virginia’s Medicaid waivers can be found on the DBHDS website.

ABOUT EVIDENCE-BASED INTERVENTIONS

There are two important resources that detail evidence-based practices and resources for children and adolescents diagnosed with ASD. Both of these initiatives were undertaken to provide information to clinicians, family members, and others because treatments for ASD are diverse and interventions with no scientific evidence were being recommended for children and adolescents with ASD. These two resources are discussed in the following paragraphs.

The National Professional Development Center on Autism Spectrum Disorders (NPDC) conducted an extensive review of the autism intervention literature published between 1997 and 2007 and identified evidence-based practices for children and youth with ASD.² The project utilized strict criteria relating to evidence-based practices. In 2014, the NPDC released findings from a follow-up review of studies from 1990-2011 and identified 27 practices that meet the criteria for evidence-based practice. The NPDC is currently developing online modules for each of the 27 identified practices.

² NPDC evidence-based practices for children and youth with ASD are available at <https://autismpdc.fpg.unc.edu/evidence-based-practices>

Table 3
Medicaid Waiver Program in Virginia

| Waiver | Description |
|--|---|
| Developmental Disability (DD) Waivers | |
| Community Living Waiver (formerly ID Waiver) | Includes residential supports and a full array of medical, behavioral, and non-medical supports. Available to adults and children. May include 24/7 supports for individuals with complex medical and/or behavioral support needs through licensed services. |
| Family & Individual Supports Waiver (formerly DD Waiver) | Provides supports for individuals living with their families, friends, or in their own homes, including supports for those with some medical or behavioral needs. Available to both children and adults. |
| Building Independence Waiver (formerly Day Support Waiver) | Supports adults (18+) to live independently in the community. Individuals own, lease, or control their own living arrangements and supports are complemented by nonwaiver-funded rent subsidies. |
| CCC Plus Waiver (formerly EDCD Waiver/Tech Waiver) | CCC Plus is a new statewide Medicaid managed care program. The CCC Plus Waiver is the community alternative to a nursing facility placement. Individuals on a DD Waiver receive their acute and primary care medical services through CCC Plus. CCC Plus Waiver service may be used while on a wait list for a DD Waiver. |

Source: Virginia Department of Behavioral Health and Developmental Services

The National Autism Center's National Standards Project has published two reports that detail evidence-based interventions for ASD based on behavioral and educational studies.³ The second phase of the Project was launched in 2011 in order to provide up-to-date information on the effectiveness of a broad range of interventions for ASD. The Phase 2 findings were published in 2015 and identified 14 interventions for children and adolescents that have sufficient evidence of effectiveness.

Analysis of both resources conducted by the California Autism Professional Training and Information Network (CAPTAIN) has noted very little difference between the reviews conducted by these two initiatives. The NPDC lists interventions separately, whereas the National Standards Project discusses treatments as intervention strategies, or classes, that are clustered into packages. There is considerable overlap between the NPDC and the National Standards Project, with a majority of the interventions being included in both resources. The consistent theme that emerges from both projects is the importance of selecting interventions that are sufficient in their intensity and that are individualized to meet the needs of the child and the family.

³ National Autism Center's National Standards Project reports are available at <http://www.autismdiagnostics.com/assets/Resources/NSP2.pdf>

EVIDENCE-BASED INTERVENTIONS

The interventions outlined in the following paragraphs have been identified as established interventions (evidence-based) by the National Autism Center's [National Standards Project](#). A summary of all interventions noted by the project is provided in Table 4. Please see the *Collection, 6th Edition* for more information about interventions listed under the "What Seems to Work" and "Not Adequately Tested" headings.

Applied Behavioral Analysis (ABA)

Also known as *early intensive behavioral intervention* and *comprehensive behavioral treatment for young children*, applied behavioral analysis is a type of behavioral intervention that uses principles of learning theory to bring about meaningful and positive change in behavior. ABA techniques have been used to help build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring) and help generalize these skills to other situations. The techniques can be used in both structured (e.g., classroom) and everyday (e.g., family dinnertime) settings and in one-on-one or group instruction. ABA has also been used for individuals with ASD who also have an intellectual disability. Intervention is customized based on the individual's needs, interests, and family situation. ABA techniques are often used in intensive, early intervention (before age four) programs to address a full range of life skills.

Positive Behavioral Interventions

Positive behavioral interventions are the most effective type of intervention for children and adolescents with ASD. They are designed to provide alternatives to unwanted behaviors by first analyzing the cause of the behavior and how it is being reinforced, and then either modifying a factor in the environment before a behavior occurs (antecedent interventions) or modifying a factor in the environment after a behavior occurs (consequent interventions). Antecedent interventions attempt to increase the likelihood of success or reduce the likelihood of problems occurring. Consequent interventions are designed to reduce challenging behavior and teach functional alternative skills through the application of basic principles of behavior change. Behavior intervention techniques are most effective if applied across multiple settings to promote generalization of skills.

Functional communication training (e.g., learning how to request breaks), noncontingent reinforcement (i.e., reinforcement delivered on a fixed time schedule), and extinction are types of positive behavioral interventions that can be used to reduce challenging behaviors (e.g., aggression, self-injury, task-avoidance) and to promote positive behaviors. Other examples of some simple behavioral interventions include:

- Setting boundaries
- Positive reinforcement of desired behaviors
- Activity schedules
- Task correspondence training

In order to effect an appropriate intervention, a functional behavioral assessment should be performed to determine when and why the behavior is occurring. Once this is determined, a positive behavioral intervention plan can be developed and implemented.

Discrete Trial Teaching or Training (DTT)

DTT is just one example of a behavioral intervention that focuses on the principles of operant learning. In DTT, children learn appropriate responses to the presence of specific words and environmental stimuli. DTT may also be called the ABC model, whereby every trial or task given to the child to perform consists of an antecedent (directive or request to the child to perform an action), behavior (response from child), and consequence (reaction from therapist). Timing and pacing of teaching sessions, practice opportunities, and consequences delivery are designed precisely for each child's learning pace and style to help ensure success.

Cognitive Behavioral Intervention Package

Cognitive behavioral therapy has long been an evidence-based intervention for individuals diagnosed with anxiety disorders and depressive disorders (i.e., without ASD). Some of these programs have been modified for youth and adolescents with ASD, such as The Coping Cat Program and Exploring Feelings. Modifications include making adjustments to materials (e.g., adding visual cues, role-play) or adjusting the structure of sessions. There are also cognitive behavioral intervention programs developed and individualized for specific purposes (e.g., to address anger management).

Language Training

Language training (production) targets the ability of the individual with ASD to communicate verbally (i.e., functional use of spoken words). It makes use of various strategies to elicit verbal communication such as modeling verbalizations and using music and positive reinforcement. Language training is just one of many interventions that can be used in combination to help children with ASD develop effective communication strategies. Other frequently used interventions are listed in the "What Seems to Work" section of Table 4.

Modeling

The goal of modeling is to correctly demonstrate a target behavior to encourage imitation. Children can learn a great deal from observing the behavior of parents, siblings, peers, and teachers, but they often need to be taught which behaviors should be imitated. There are two types of modeling: live and video modeling. Live modeling occurs when a person demonstrates the target behavior in the presence of the child. Video modeling occurs when the target behavior is pre-recorded. Video modeling can be a great option for children and adolescents who have an affinity for television shows and movies, or who have an interest in seeing themselves on a monitor. Some children and adolescents may enjoy assisting in the production of the video.

Naturalistic Teaching Strategies (NTS)

NTS are a compilation of strategies that are used to teach children skills in their home, school, and community. The basic concepts include using materials in the environment and naturally occurring activities as opportunities to increase adaptive skills. These strategies are primarily child-directed.

Parent Training Package

Parent training focuses on the interventions in which parents acted as therapists or received training to implement various strategies. This intervention acknowledges the critical role that parents and caregivers play in providing a therapeutic environment for their family members with ASD.

Peer Training Package

Difficulty interacting appropriately with peers is a commonly reported characteristic of ASD, and children with ASD often rely on adults for prompting and guidance. Peer training packages train peers on how to initiate and respond during social interactions with a child with ASD. These programs have been used in school and community settings.

Learning Experience: An Alternative Program (LEAP)

LEAP is an example of a peer-based educational program that embraces the educational and therapeutic value of peer-mediated interventions. It provides classroom instruction, parent education (as needed), and the provision of speech and occupational therapy and other services within the classroom. The range of activities varies from quiet to active, from small group to larger group, and from child- versus teacher-directed. Peers are actively involved in the curriculum as intervention agents.

Pivotal Response Training (PRT)

PRT focuses on targeting pivotal behaviors related to motivation to engage in social communication, self-initiation, self-management, and responsiveness to multiple cues. Key to the delivery of PRT is parent involvement and implementation in the natural environment such as the home, community, and school setting. PRT is based on the theory that, if improvements in functioning can be achieved in the areas that are most disabling to children (i.e., pivotal areas), then effects should extend to other areas. PRT is now considered one of the more effective and proven interventions for children with ASD.

Schedules

Schedules can be used for children with ASD to increase their independence and allow them to plan for upcoming activities. A schedule simply identifies the activities that must be completed during a given time period and the order in which these activities should be completed. Schedules can be written, pictorial, or a combination. Children with ASD may better handle transitions when they can predict what will happen next.

Scripting

Scripting occurs when a youth with ASD is provided guidance as to how to use language to initiate or respond in certain situations. These interventions involve developing an oral and/or written script about a specific skill or situation that serves as a model for the child. Scripts are usually practiced repeatedly before the skill is used in the actual situation.

Self-Management

Self-management strategies have been widely used to promote independence with tasks in which adult supervision is not needed, accepted, or expected. Youth often evaluate and record their performance while completing an activity. Self-management is also used to help these individuals monitor social behaviors and disruptive behaviors, and can involve rewards to reinforce positive behavior.

Social Skills Package

Social skills refer to a wide range of abilities, such as making eye contact appropriately, using gestures, reciprocating information, and initiating or ending an interaction. The challenges individuals with ASD face regarding social skills vary greatly. The general goal of any social skills package intervention is to provide individuals with the skills necessary to participate meaningfully in social environments.

Story-based Intervention

Story-based interventions identify a target behavior and involve a written description of the situations under which specific behaviors are expected to occur. Most stories aim to increase perspective taking skills and are written from an “I” or “some people” perspective. The most well-known story-based intervention is Social Stories. Effective social stories are written from a positive standpoint and avoid using negatives. For example, to change a behavior, the story might state, “I will do ____ when I get home.” It would not say, “I won’t do ____ when I get home.”

Table 4
Summary of Interventions for ASD⁴

| What Works | |
|---|---|
| Applied behavior analysis (ABA) | Uses principles of learning theory to bring about meaningful and positive change in behavior, build a variety of skills (e.g., communication, social skills, self-control, and self-monitoring), and help generalize these skills to other situations. Also known as early intensive behavioral intervention and comprehensive behavioral treatment for young children (CBTYC). |
| Positive behavioral interventions | Behavioral interventions analyze the cause of a negative behavior and how it is being reinforced, and then offer techniques targeted to promoting positive behaviors. |
| Discrete trial teaching or training (DTT) | A behavioral intervention that uses operant learning techniques to change behavior. Also known as the ABC model (action request, behavior, consequence). |

⁴ Interventions are taken from the National Autism Center's National Standards Project. More information can be found at: <http://www.autismdiagnostics.com/assets/Resources/NSP2.pdf>

Table 4 (continued)
Summary of Interventions for ASD

| What Works (continued) | |
|--|---|
| Cognitive behavioral intervention package | CBT modified for ASD youth. |
| Language training | Targets the ability to communicate verbally. |
| Modeling | Involves demonstrating a target behavior to encourage imitation. |
| Naturalistic teaching strategies (NTS) | Child-directed strategies that use naturally occurring activities to increase adaptive skills. |
| Parent training package | Involves training parents to act as therapists. |
| Peer training package | Involves training peers on how to behave during social interactions with a youth with ASD. |
| Learning experience: An alternative program (LEAP) | A type of peer training program for peers, teachers, parents, and others. |
| Pivotal response training (PRI) | Involves targeting pivotal behaviors related to motivation to engage in social communication, self-initiation, self-management, and responsiveness to multiple cues. |
| Schedules | Used to increase independence in youth with ASD. |
| Scripting | Provides scripted language to be used as a model in specific situations. |
| Self-management | Strategies that involve teaching youth to track performance while completing an activity. |
| Social skills package | Aims to provide youth with the skills (such as making eye contact appropriately) necessary to participate in social environments. |
| Story-based intervention | Uses stories to increase perspective-taking skills. |
| What Seems to Work | |
| Augmentative and alternative communication devices | Communication systems designed to complement speech (pictures, symbols, communication boards, or other assistive technology, like tablets, text-to-speech programs, etc.). |
| Developmental relationship-based treatment | Programs that emphasize the importance of building social relationships by using the principals of developmental theory. |
| Exercise | Uses physical exertion to regulate behavior and help with social, communication, and motor skills. |
| Exposure package | Involves gradually exposing youth to the non-dangerous situations that they fear, with a focus on having them learn that their anxiety will decrease over time. At the same time the use of maladaptive strategies used in the past is prevented. |

Table 4 (continued)
Summary of Interventions for ASD

| What Seems to Work (continued) | |
|--|---|
| Functional communication training | Behavioral method that replaces disruptive or inappropriate behavior with more appropriate and effective communication. |
| Imitation-based intervention | Relies on adults imitating the actions of a child. |
| Initiation training | Involves directly teaching individuals with ASD to initiate interactions with their peers. |
| Language training (production and understanding) | Aims to increase both speech production and understanding of communicative acts. |
| Massage therapy | Involves the provision of deep tissue stimulation. |
| Multi-component package | Involves a combination of multiple treatment procedures that are derived from different fields of interest or different theoretical orientations. |
| Music therapy | Aims to teach individual skills or goals through music. |
| Picture exchange communication system | Involves the application of a specific augmentative and alternative communication system designed to teach functional communication to youth with limited communication skills. |
| Reductive package | Relies on strategies designed to reduce problem behaviors without increasing alternative appropriate behaviors. |
| Sign language instruction | Teaches sign language as a means of communicating. |
| Social communication intervention | Targets some combination of social communication impairments. |
| Structured teaching | Relies heavily on the physical organization of setting, predictable schedules, and individualized use of teaching methods. |
| Technology-based intervention | Presents instructional materials using the medium of computers or related technologies. |
| Theory of mind training | Aims to teach youth to recognize and identify the mental states of others. |
| Not Adequately Tested | |
| <ul style="list-style-type: none"> Animal-assisted therapy (e.g., hippotherapy: the use of horseback riding as a therapeutic or rehabilitative treatment) Auditory integration training Concept mapping DIR/Floortime Facilitated communication Gluten-free and/or casein-free diet Movement-based intervention SENSE theatre intervention Sensory intervention package Social-behavioral learning strategy Social cognition intervention Social thinking intervention | |

RESOURCES AND ORGANIZATIONS

American Academy of Pediatrics

<http://www.aap.org>

American Speech-Language-Hearing Association

Autism Spectrum Disorder

<https://www.asha.org/Practice-Portal/Clinical-Topics/Autism/>

Autism Focused Intervention Resources and Modules (AFIRM)

<http://afirm.fpg.unc.edu/selecting-ebp>

Asperger Syndrome Education Network (ASPEN)

<http://www.aspennj.org>

Association of University Centers on Disabilities

<http://www.aucd.org>

Autism and PDD Support Network

<http://www.autism-pdd.net>

Autism Research Institute (ARI)

<https://www.autism.com/index.asp>

Autism Society of America

<http://www.autism-society.org/>

Autism Speaks

<http://www.autismspeaks.org>

Autism Spectrum Connection

<http://www.aspergersyndrome.org/>

Centers for Disease Control and Prevention

Autism Spectrum Disorder (ASD)

<http://www.cdc.gov/ncbddd/autism/index.html>

Signs and symptoms

<https://www.cdc.gov/ncbddd/autism/facts.html>

Developmental milestone information

<https://www.cdc.gov/ncbddd/actearly/milestones-app.html>

Center for Parent Information and Resources

<http://www.parentcenterhub.org/>

Individuals with Disabilities Education Act (IDEA)

<https://sites.ed.gov/idea/>

Interagency Autism Coordinating Committee

<https://iacc.hhs.gov/>

National Autism Center

<http://www.nationalautismcenter.org>

National Standards Project

<http://www.autismdiagnostics.com/assets/Resources/NSP2.pdf>

National Alliance for Autism Research

<https://www.nchpad.org>

National Association of the Dually Diagnosed (NADD)

<http://thenadd.org/about-nadd/>

National Institute of Child Health and Human Development

<https://www.nichd.nih.gov/Pages/index.aspx>

National Institute of Mental Health (NIMH)

Autism Spectrum Disorder

<https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>

National Institute on Deafness and Other Communication Disorders

<http://www.nidcd.nih.gov>

National Professional Development Center

<http://autismpdc.fpg.unc.edu/>

Evidence-based practices

<https://autismpdc.fpg.unc.edu/evidence-based-practices>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

U.S. Autism & Asperger Association

<http://www.usautism.org>

U.S. Department of Education

U.S. Office of Special Education and Rehabilitative Services

<https://www2.ed.gov/about/offices/list/osers/index.html>

U.S. Department of Health and Human Services

The Interagency Autism Coordinating Committee

<https://iacc.hhs.gov/>

Wrights Law

<http://www.wrightslaw.com/>

VIRGINIA RESOURCES AND ORGANIZATIONS

Autism Outreach, Inc.

<http://autismoutreach.org/>

Autism Society of America

Central Virginia Chapter

<http://ascv.org>

Commonwealth Autism

4108 E. Parham Road

Henrico, VA 23228

<http://www.autismva.org/>

Infant & Toddler Connection of Virginia

<http://www.infantva.org/>

Parent Educational Advocacy Training Center (PEATC)

6320 Augusta Drive, Suite 1200

Springfield, VA 22150

<http://www.peatc.org/>

Partnership for People with Disabilities

<https://partnership.vcu.edu/>

The Radford University Autism Center

<http://www.radford.edu/content/wchs/home/cosd.html/autism.html>

Virginia Autism Advisory Council

<http://www.autismtrainingva.org/>

Virginia Autism Project

<http://www.virginiaautismproject.com/>

Virginia Autism Resource Center

<http://www.varc.org/>

Virginia Board for People with Disabilities

<https://www.vaboard.org/>

Virginia Commonwealth University Autism Center for Excellence (VCU-ACE)

<http://www.vcuautismcenter.org/projects/diagnosis.cfm>

Virginia Department for Aging and Rehabilitative Services

<https://vadars.org/>

Virginia Department of Behavioral Health and Developmental Services (VDBHDS)

<http://www.dbhds.virginia.gov/>

Medicaid Waiver information:

https://csa.virginia.gov/Content/doc/DMAS_Program_Changes_Learning_the_New_DD_Waivers_and_the_CCC_Plus_Waiver_2018.pdf

Infant and Toddler Connection of VA

<http://www.infantva.org/>

Virginia Department of Education

Office of Special Education

http://www.doe.virginia.gov/special_ed/index.shtml

Publications:

Autism Spectrum Disorders

http://www.doe.virginia.gov/special_ed/disabilities/autism/index.shtml

Autism Spectrum Disorders and the Transition to Adulthood

http://www.doe.virginia.gov/special_ed/disabilities/autism/technical_asst_documents/autism_transition.pdf

Guidelines for Educating Students with Autism Spectrum Disorders

http://www.doe.virginia.gov/special_ed/disabilities/autism/technical_asst_documents/autism_guidelines.pdf

Models of Best Practice in the Education of Students with Autism Spectrum Disorders

http://www.doe.virginia.gov/special_ed/disabilities/autism/technical_asst_documents/autism_models_of_best_practice.pdf

Virginia Department of Health

Division of Child & Adolescent Health

<http://www.vdh.virginia.gov>

Virginia Department of Medical Assistance Service

<http://www.dmas.virginia.gov/>

Virginia Institute of Autism

<http://www.viaschool.org>

Virginia Tech Autism Clinic

<http://www.psyc.vt.edu/outreach/autism>

Virginia's Training/Technical Assistance Centers

<http://ttaonline.org/>



ATTENTION-DEFICIT/ HYPERACTIVITY DISORDER

OVERVIEW

All children show inattention, distractibility, impulsivity, or hyperactivity, but children with ADHD show increasingly severe and frequent symptoms. If not controlled, these children frequently experience peer rejection, academic struggles, and social difficulties, all of which can have long-term effects.

ADHD is classified as a chronic, neurodevelopmental disorder that emerges during childhood. Children with ADHD typically do not outgrow the disorder, although they may experience some reduction in symptoms of hyperactivity.

ADHD is broken down into the three subcategories listed below. Each of these subcategories can be classified as mild, moderate, or severe.

1. Predominantly hyperactive-impulsive type
2. Predominantly inattentive type
3. Combined presentation

Table 1 outlines common symptoms of ADHD. Several of the symptoms must have been present before the age of 12, must be present in two or more settings, and must interfere with quality of life.

Before diagnosing a child with ADHD, the clinician should rule out other potential reasons for the child's behavior. For instance, behaviors that mimic ADHD may be the result of trauma or post-traumatic stress disorder, a sudden change in the child's life, undetected seizures, a middle ear infection causing hearing problems, medical disorders affecting brain functioning, a learning disability, communication disorders, anxiety, or depression. In addition, children with high energy levels, who are immature when compared to their peers, or who have been deemed "difficult" by parents or teachers can also be misdiagnosed with ADHD.

Because so many disorders and behaviors can be mistaken for ADHD, qualified mental health professionals are the only individuals with the ability to properly diagnose and treat this disorder. Qualified mental health

KEY POINTS

- Characterized by problems with attention, impulsivity, and/or hyperactivity.
- Symptoms can lead to peer rejection and academic struggles, which can cause long-term issues.
- Proper diagnosis is critical because some medical and mental health disorders, including post-traumatic stress disorder, have similar symptoms.
- A combination of behavioral and pharmacological treatments has the most evidentiary support.

professionals include child psychiatrists, psychologists, developmental/behavioral pediatricians, behavioral neurologists and, in some cases, clinical social workers.

Table 1
Common Signs and Symptoms of ADHD

| Symptoms of Inattention | Symptoms of Hyperactivity and Impulsivity |
|--|---|
| <ul style="list-style-type: none">• Trouble paying attention• Inattention to details and makes careless mistakes• Easily distracted• Loses school supplies; forgets to turn in homework• Trouble finishing class work and homework• Trouble listening• Trouble following more than one instruction at a time | <ul style="list-style-type: none">• Blurts out answers• Is impatient or easily frustrated• Fidgets or squirms• Frequently leaves seat, runs about, or climbs excessively• Seems “on the go” or “driven by a motor”• Talks too much and has difficulty playing quietly• Interrupts or intrudes on others |

In addition, co-occurring conditions and disorders can accompany ADHD and should be assessed during an evaluation for ADHD. The presence of a co-occurring disorder will influence treatment planning, especially pharmacological interventions.

CAUSES AND RISK FACTORS

Mounting evidence has demonstrated a neurological and a genetic basis for ADHD. A child diagnosed with ADHD is more likely than one without ADHD to have family members with the disorder. The heritability of ADHD averages approximately 80 percent, rivaling the heritability factor for the trait of height.¹ In fact, according to the National Institutes of Health (NIH) one-third of fathers who have or had ADHD will have children who will be diagnosed with ADHD.

A study of children with ADHD showed that most of ADHD development is genetically driven, but in certain cases, ADHD may also result from very early adverse childhood experiences. Children who have experienced negative experiences early in life are diagnosed sooner than those with only genetic connections. The associated impulsivity and inattention is more severe, while the hyperactivity is less severe than in those children without negative experiences.²

EVIDENCE-BASED TREATMENTS

ADHD is a chronic disorder; therefore, management of symptoms is the goal of treatment. Treatment must be provided over long periods to assist those with ADHD in the ongoing management of their disorder. Current

¹ Barkley, R. (2007). *Defiant children: A clinician’s manual for assessment and parent training* (2nd ed.). New York, NY: Guilford.

² Webb, E. (2013). Poverty, maltreatment, and attention deficit hyperactivity disorder. *Archives of Diseases in Childhood*, 98(6), 397-400.

research suggests that a combination of behavioral and pharmacological treatments is the most effective. Treatments are summarized in Table 2.

Effective treatment also includes developing and utilizing an appropriate educational program. For this reason, it is important that parents advocate for their children in academic settings. Children with ADHD may be eligible for special educational services in the public schools under both the Individuals with Disabilities in Education Act (IDEA), which governs special education requirements, and Section 504 of the Rehabilitation Act of 1973, which provides for reasonable accommodations for children with disabilities. Examples of accommodations include:

- Reducing the number of homework problems without reducing level or content of material
- Providing students with a quiet place to take exams or study
- Providing students with additional time on exams
- Providing the student with access to counseling services

Psychological Treatments

Behavior therapy is the psychological treatment of choice for ADHD. Behavior therapy uses contingency management strategies that employ reward systems that are designed to provide reinforcements to increase desired behaviors, including following directions, attentiveness, or turn-taking. Rewards systems can take many forms, including, but not limited to, points, stickers, poker chips, or other tokens that can be traded for small prizes or special privileges. These strategies can also remove a reinforcer when undesirable behavior occurs in order to reduce that behavior.

Behavioral intervention systems can be put in place both in the classroom and at home. Through behavior management, parents, guardians, and other adults should focus on positive behaviors and seek to find the youth behaving properly as much as possible. This will help shift the youth's energy to being good, and thus reduce the focus on poor behaviors.

Pharmacological Treatments

Stimulant medications are most frequently prescribed for the treatment of ADHD. Studies have found a significant majority of children with ADHD derive benefits from these medications and that they are effective at reducing ADHD symptoms in the short-term.

Two frequently prescribed stimulant medications for ADHD are methylphenidate (i.e., Ritalin or Concerta) and amphetamines (e.g., Adderall). The tolerability and safety of stimulant medications are comparable, with all medications demonstrating similar side effects, including effects on cardiovascular functioning, sleep disturbance, appetite suppression, and anxiety. There is also a potential for abuse of stimulant medications due to their effects on the brain. As a result, methylphenidate and dexamphetamine are listed as Schedule II drugs with the U.S. Food and Drug Administration (FDA), and public schools may not require any student to take these medications.

The FDA has also approved atomoxetine, a medication for treating ADHD that is not a stimulant and does not carry the same risk of addiction. The side effects of atomoxetine are similar to those of stimulant medications but are milder.

Table 2
Summary of Treatments and Interventions for ADHD

| What Works | |
|---|---|
| Behavioral classroom management (BCM) | BCM uses contingency management strategies, including teacher-implemented reward programs, token systems, time-out procedures, and daily report cards (DRCs). Clinicians or parents may work in consultation with teachers to develop a classroom treatment plan. |
| Behavioral parent training (BPT) | BPT teaches the parent to implement contingency management strategies similar to BCM techniques at home. |
| Intensive behavioral peer intervention (BPI) | Intensive BPI is conducted in recreational settings, such as summer treatment programs (STPs). STPs have demonstrated effectiveness and are considered well-established. However, STPs are less feasible to implement than other evidence-based practices. |
| Stimulant: d-Amphetamine | Short-acting: Adderall, Dexedrine, DextroStat Long-acting: Dexedrine Spansule, Adderall XR, Lisdexamfetamine |
| Stimulant: Methylphenidate | Short-acting: Focaline, Methylin, Ritalin; Intermediate-acting: Metadate ER, Methylin ER, Ritalin SR, Metadate CD, Ritalin LA; Long-acting: Concerta, Daytrana patch, Focalin XR |
| Serotonin and norepinephrine reuptake inhibitor (SNRI): atomoxetine | Atomoxetine is unique in its ability to act on the brain's norepinephrine transporters without carrying the same risk for addiction as other medications. |
| Not Adequately Tested | |
| Dietary interventions | Interventions include elimination of food additives, elimination of allergens/sensitivities, and use of nutritional supplements. |
| Interactive metronome training | Involves synchronizing of hand and foot exercises to audible tones. |
| Neurofeedback | Involves monitoring brain waves and rewarding focused attention through computerized games and exercises. |
| Antidepressants | These include bupropion (Wellbutrin), imipramine (Tofranil), nortriptyline (Pamelor, Aventil), clonidine (Catapres) and guanfacine (Tenex). |
| What Does Not Work | |
| Cognitive, psychodynamic, and client-centered therapies | Traditional talk therapies and play therapy have been demonstrated to have little to no effect on ADHD symptoms. ADHD is best treated with intensive behavioral interventions in the youth's environment. |
| Office-based social skills training | Once-weekly office-based training, either one-on-one or in a group setting, have not led to significant improvement in social skills. However, intensive group social skills training that uses behavioral interventions are considered well-established. |

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

ADHD Resource Center

http://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/ADHD_Resource_Center/Home.aspx

American Psychiatric Association (APA)

Parents Med Guide

<http://www.parentsmedguide.org/>

Attention Deficit Disorders Association – Southern Region

<http://www.adda-sr.org/>

Association for Applied Psychophysiology and Biofeedback (AAPB)

<https://www.aapb.org>

Centers for Disease Control and Prevention (CDC)

Attention-Deficit/Hyperactivity Disorder

<https://www.cdc.gov/ncbddd/adhd/>

Children and Adults with Attention Deficit Disorders (CHADD)

<http://www.chadd.org/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

U.S. Department of Education

Identifying and Treating Attention Deficit Hyperactivity Disorder: A Resource for School and Home

<https://www2.ed.gov/rschstat/research/pubs/adhd/adhd-identifying.html>

VIRGINIA RESOURCES AND ORGANIZATIONS

Children and Adults with Attention Deficit Disorders (CHADD)

<http://www.chadd.org/>

Central Virginia Chapter

804-385-3139

Northern Virginia CHADD

24-Hour Information Line - 703-641-5451

CHADD of Tidewater

866-633-4871 (Toll free)

CHADD Shenandoah Valley Satellite

540-241-4754

Parent Educational Advocacy Training Center

www.peatc.org

Virginia Commonwealth University

Center for ADHD Research, Education, and Service

<http://www.adhd.vcu.edu/clinical-services/>

Virginia Department of Education

Attention-Deficit/Hyperactivity Disorder

http://www.doe.virginia.gov/special_ed/disabilities/other_health_impairment/specific_conditions.shtml

Virginia Department of Health

Guidelines for Healthcare Procedures in Schools
(Page 405, ADHD)

http://www.vdh.virginia.gov/content/uploads/sites/58/2016/12/VDH-Guidelines-for-Healthcare-Procedures-in-Schools_2017.pdf

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>



MOTOR DISORDERS

Developmental Coordination Disorder
Stereotypic Movement Disorder
Tic Disorders

OVERVIEW

Motor disorders begin early in the developmental years and involve problems with movement. Children with motor disorders may be substantially delayed in reaching motor milestones (such as navigating stairs or tying shoes); they may make repetitive and driven movements (such as rocking); or they may have physical or verbal tics. As with other disorders, these behaviors cause impairment and result in negative physical and/or social consequences.

The three main categories of motor disorders are developmental coordination disorder, stereotypic movement disorder, and tic disorders (see Table 1). Because each category has different treatments, each will be discussed in its own section of this chapter.

Table 1
Motor Disorders Affecting Children & Adolescents

| Disorder | Description |
|--|---|
| Developmental coordination disorder | Coordinated motor skills, both developing and executing, is substantially below expectations based on age and education. Symptoms include clumsiness and slow and inaccurate motor skills. Onset is early in development. |
| Stereotypic movement disorder | Includes repetitive, driven, and purposeless motor behavior like shaking, rocking and hitting oneself. Onset is early in development. |
| Tic disorders | Tics are involuntary movements, sounds, or words that are sudden, rapid, recurrent, and nonrhythmic. |
| Tourette disorder | Both vocal and motor tics for a period of more than one year, but not necessarily concurrently. The tics may wax and wane in frequency. Onset is prior to age 18. |
| Persistent (chronic) vocal or motor tic disorder | Single or multiple motor tics or verbal tics occurring multiple times daily or almost daily for more than one year. Onset before age 18. Both motor and verbal tics cannot be present for this diagnosis. |
| Provisional tic disorder | Single or multiple vocal and/or motor tics present for less than one year. Onset before age 18. |

CAUSES AND RISK FACTORS

Underlying causes for the development of motor disorders are not well understood. However, as with many psychological disorders, the evidence suggests that numerous factors, such as genetic vulnerability, learning, and environment, may contribute to the development of these disorders.

Studies of families suggest the presence of genetic underpinnings in the development of tic disorders. For example, relatives of individuals with Tourette disorder are 10 to 15 percent more likely to develop the disorder, and 15 to 20 percent more likely to have another tic disorder.¹ These risk levels are significantly higher than in the general population. Studies have also shown that 25 percent of youth with stereotypic motor disorder have an affected relative.² There is also likely to be a family history of obsessive tendencies often in the form of counting rituals.

There is also reason to believe that learning factors are significant in the development and maintenance of motor disorders. In stressful situations, for example, youth can develop the urge to trigger their tics or to self-injure. After the tic or self-injury becomes habitual, all similar situations may elicit the same response. These situations may, in turn, elicit an urge to perform the habit. Youth with motor disorders report an uncomfortable urge that is satisfied by the tic or self-injury. The satisfaction or reduction of the urge may reinforce the habit and thus increase the likelihood that the youth will repeat the behavior.

Environmental factors have also been implicated in the development of motor disorders. Developmental coordination disorder may be caused by prenatal exposure to alcohol, and it is often associated with preterm and children with a low birth weight. Stereotypic movement disorder is frequently seen in socially isolated children who tend to self-stimulate, which may progress to stereotypic movements and even repetitive self-injury. There have also been cases in which individuals who suffered from a traumatic head injury (e.g. concussion) had symptoms that mimic those seen in of stereotypic motor disorder.

¹ Woods, D., Flessner, C., & Conelea, C. (2008). Habit disorders. In M. Hersen (Series Ed.), & D. Reitman (Vol. Ed.) *Handbook of psychological assessment, case conceptualization, and treatment: Vol 7. Children and adolescents* (pp. 542-570). New York: Wiley.

² Mills, S., & Hedderly, T. (2014). A guide to childhood motor stereotypies, tic disorders and the Tourette spectrum for the primary care practitioner. *The Ulster Medical Journal*, 83(1), 22-30.

DEVELOPMENTAL COORDINATION DISORDER

Developmental coordination disorder presents early in development. A child with developmental coordination disorder develops and executes coordinated motor skills substantially below expectations based on the child's age and education. A child may be clumsy or his or her motor skills may be slow, inaccurate, or both. Although onset is early in a child's life, most diagnoses normally do not occur prior to age five, when a child enters school. Problems remain in about 50 to 70 percent of children diagnosed even after coordination improves.

KEY POINTS

- **Characterized by delays in reaching motor milestones.**
- **About half of children with this disorder also have ADHD.**
- **There are no evidence-based treatments at this time.**
- **Activity-oriented and body function-oriented treatments have the best results.**

For developmental coordination disorder, it is important to recognize that symptoms may be confused with those of other conditions. There are four criteria that must be met:

1. The child shows delays in reaching motor milestones.
2. The condition significantly interferes with activities of daily living and/or academic performance.
3. The symptoms begin early in the child's life.
4. Difficulties with motor skills are not better explained by intellectual disability, visual impairment, or brain disorders.

Young children with developmental coordination disorder may be delayed in reaching motor milestones such as climbing stairs and buttoning shirts. They may reach these milestones, but do so with awkward, slow, or imprecise movements when compared with their peers. Alternatively, older children may show slow speed or inaccurate movements with skills like handwriting, puzzles, model building, ball games, or self-care. Only when these slow, awkward movements interfere with performing or participating in daily activities can a developmental coordination disorder diagnosis be given. Also, the child must be assessed for any visual impairments and neurological disorders before they are diagnosed with developmental coordination disorder.

ADHD is the most frequent coexisting condition in youth with developmental coordination disorder, with about 50 percent co-occurrence. Other common co-occurring disorders included autism spectrum disorder (ASD), disruptive and emotional behavior problems, speech and language disorder, and specific learning disorder, especially with reading and writing.

TREATMENTS FOR DEVELOPMENTAL COORDINATION DISORDER

There are no evidence-based practices identified for motor disorders at this time. This is, in part, because this disorder can manifest in a variety of ways, and because issues such as co-occurring conditions and associated emotional difficulties vary from child to child. However, results have overwhelmingly shown that activity-oriented and body function-oriented interventions (such as physical and occupational therapy) have the best results. Table 2 describes treatments for developmental coordination disorder.

In general, therapies that aim to improve motor function can use a task-oriented or process-oriented approach.

- In a task-oriented approach, an observed motor challenge is identified (for instance, catching a ball), and the task is broken down into step-by-step interventions that focus on teaching and practicing the skill.
- In a process-oriented approach, the therapist focuses not on tasks (at least initially), but on how children manage their bodies and process sensory information. The assumption is that once the underlying mechanism that is causing the motor challenge is improved, related motor skills will improve also.

Table 2
Summary of Treatments for Developmental Coordination Disorder

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive motor intervention | Therapists design a set of exercises into steps for children to practice at home. Emotional, motivational, and cognitive aspects are emphasized, as children are taught how to plan a movement, how to execute it, and how to evaluate their success. Building self-confidence through positive reinforcement is a critical goal, as success depends upon the patient's motivation to practice outside of therapy. |
| Physical and occupational therapy | Tailored to a child's specific needs. |

STEREOTYPIC MOVEMENT DISORDER

Stereotypic movement disorder presents early in a child's development. Symptoms include repetitive and driven motor behaviors (stereotypies) like shaking, rocking, and hitting oneself. Stereotypies frequently involve arms, hands, or the entire body. Simple stereotypic movements are often present in typically developing children under the age of three. As these children get older, they are able to stop repetitive motions when asked or when they choose to. However, children with stereotypic movement disorder cannot stop the motions by force of will; instead, they will restrict their movements through other means such as sitting on their hands or wrapping their arms in their clothing. Table 3 describes the difference between stereotypies and tics.

KEY POINTS

- **Characterized by repetitive and driven motor behaviors, like rocking or hitting oneself, that the child cannot stop through force of will.**
- **Can be a symptom of another disorder.**
- **Often co-occurs with ID or ASD.**
- **Habit reversal therapy is the most effective treatment.**

Table 3
Stereotypies vs. Tics

| | Stereotypies | Tics |
|---|---|---|
| How do they manifest? | Rhythmic, prolonged, repetitive movements, such as rocking. Movements are fixed, identical, and predictable. | Brief, rapid, sudden movements and/or vocalizations, such as grimacing or shouting a word. A tic is random and unpredictable. |
| What part of the body is involved? | Frequently involve arms, hands, or the entire body. | Frequently involve eyes, face, head, and shoulders. |
| In what circumstances do they occur? | Commonly occur: <ul style="list-style-type: none"> • When the child is engrossed in an activity. • During periods of anxiety, excitement, or fatigue. | Commonly occur during periods of anxiety, excitement, or fatigue. |
| Are they preceded by an urge or physical sensation? | No | Yes |
| How does the child feel? | Movements often appear enjoyable. | Tics are often associated with distress or discomfort. |
| Can they be reduced by distracting the child? | Yes (more immediately than tics) | Yes |
| Can they be suppressed? | Rarely. Typically the child must stop the movement by other means (e.g., by sitting on hands). | Yes, temporarily. Suppression usually causes distress. |

There are two types of classifications for stereotypic movement disorder: “with self-injurious behavior” and “without self-injurious behavior.” Children with the classification “with self-injurious behavior” engage in movements that could be harmful to their bodies (e.g. lip biting, head banging, or eye poking). Conversely, children with the classification “without self-injurious behavior” engage in movements that are not physically harmful to themselves (e.g. body rocking, arm flapping, or head nodding).

Stereotypies are frequently a presenting symptom of intellectual disability and autism spectrum disorder, or may be a secondary diagnosis. Disorders such as ADHD, obsessive-compulsive disorder, tic disorders, and anxiety disorders also can co-occur with stereotypic disorder. In addition, stereotypies can be a manifestation of another disorder, such as Lesch-Nyhan syndrome, Rett syndrome, fragile X syndrome, Cornelia de Lange syndrome, and Smith-Magenis syndrome. For these reasons, a comprehensive assessment is critical.

EVIDENCE-BASED TREATMENTS FOR STEREOTYPIC MOVEMENT DISORDER

Table 4 describes treatments for stereotypic movement disorder.

Table 4
Summary of Treatments for Stereotypic Movement Disorder

| What Works | |
|------------------------------|---|
| Habit reversal therapy (HRT) | Increases awareness to the feelings and context associated with the stereotypies and implements competing and inconspicuous habits in their place. HRT can be modified to include rewards, relaxation, education, self-awareness, and situational changes. It is sometimes combined with other therapies. |
| What Seems to Work | |
| Medication | Medications may be considered for moderate to severe stereotypies causing severe impairment in quality of life or when co-occurring conditions that would also benefit from the medication are present. |

Habit Reversal Therapy (HRT)

HRT is the most well-studied and most effective treatment for youth with motor disorders. HRT involves first teaching youth to become aware of instances of the habit, then teaching awareness of the associated environment and internal sensations (e.g., recognizing stressful situations that trigger stereotypies). Once the youth is able to identify feelings and situations likely to elicit the habit, he or she is taught a competing response. A competing response is a behavior that is physically incompatible with the habit and is socially inconspicuous. Supportive individuals are recruited to provide gentle reminders when the youth is engaging in the habit and praise when the competing response is implemented correctly. HRT can be modified to include other components, including rewards and relaxation training.

TIC DISORDERS

Tics are involuntary movements, sounds, or words that are sudden, rapid, recurrent, and nonrhythmic. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) uses the following terminology to describe tics:

- **Vocal tics** – examples include repeated throat clearing or spoken words
- **Motor tics** – examples include repeated blinking or arm movements
- **Simple tics** – a short, brief noise or movement
- **Complex tics** – a vocalization, noise, or movement that appears to take effort, like a spoken word, a complex sound, or raising one's arm up over one's head

KEY POINTS

- **Characterized by rapid and nonrhythmic movements or vocal sounds.**
- **Can be a symptom of another disorder.**
- **Often co-occurs with obsessive-compulsive disorder or ADHD.**
- **Habit reversal therapies that target tics are the most effective treatments.**

Tics vary from other childhood movement disorders in a few ways. They have varied severity, their movement characteristics change over time, the movements are temporarily suppressible, and they are associated with sensory phenomena. Table 3 describes the difference between tics and stereotypies.

The three primary tic disorders described in the DSM-5 are outlined below:

- **Tourette disorder** is the most well-known tic disorder, largely because of its depictions in movies and television shows, but it is relatively uncommon. Symptoms for Tourette disorder must be present before age 18, and both vocal and motor tics must be present. The tics may vary over time, but must persist for over one year since the onset of the original symptoms. Age of onset can be anywhere between the ages of two and 21, with the most severe tics occurring between the ages of 10 and 12.
- **Persistent (chronic) motor or vocal tic disorder** involves one or more motor or vocal tics, but cannot include both. If both motor and vocal tics occur, the child should be screened for Tourette disorder. The tics may vary in frequency, but must persist for more than one year after onset. Tics must begin before age 18 and cannot be attributable to another disorder or substance.
- **Provisional tic disorder** is diagnosed when tics are present for less than one year. There can be one or more tics, which can include motor and/or vocal tics. Tics cannot be attributable to another disorder or substance. Additionally, the child cannot have been diagnosed with Tourette disorder or persistent (chronic) motor or vocal tic disorder in the past.

Assessment of tic disorders should include a medical examination to rule out conditions that can mimic tic disorders, such as behaviors related to allergies, eye problems that mimic tics, and stereotypic movement disorder. Other medical conditions that may cause tics, such as Huntington's disease or post-viral encephalitis, must also be considered prior to diagnosing a motor disorder.

Youth with tic disorders frequently experience co-occurring obsessive-compulsive disorder and ADHD. Individuals with tic disorders can also have other movement disorders, as well as depressive, bipolar, or substance-use disorders. Pre-pubertal children with tic disorders are more likely to experience ADHD, obsessive-compulsive disorder, and separation anxiety disorder than are teenagers and adults, who are more likely to experience the new onset of major depressive disorder, substance use disorder, or bipolar disorder.

Given the frequent comorbidity of tic disorders with other psychiatric conditions, any assessment of a child or adolescent that reveals the presence of tics should prompt assessment for co-occurring mental health disorders.

EVIDENCE-BASED TREATMENTS FOR TIC DISORDERS

Table 5 describes treatments for tic disorders.

Habit Reversal Therapy (HRT)

Habit reversal therapy (HRT) is the most well-studied and most effective treatment for youth with motor disorders. HRT involves first teaching youth to become aware of instances of the habit, then teaching awareness of the associated environment and internal sensations, such as muscle tension and urges. Once the youth is able to identify feelings and situations likely to elicit the habit, he or she is taught a competing response. A competing response is a behavior that is physically incompatible with the habit and is socially inconspicuous. Supportive individuals are recruited to provide gentle reminders when the youth is engaging in the habit and praise when the competing response is implemented correctly.

Comprehensive Behavioral Intervention for Tics (C-BIT)

Comprehensive behavioral intervention for tics (C-BIT) combines habit reversal and awareness of tics through techniques like self-monitoring, along with education about tics and relaxation techniques. A therapist works with the child and his or her family to understand the types of tics and situations in which the tics occur (CDC). Where HRT combines tic awareness and competing-response training, C-BIT includes relaxation training and functional intervention. C-BIT helps the patient identify situations in which tics occur and develop strategies to overcome the tic.

Table 5
Summary of Treatments for Tic Disorders

| What Works | |
|---|---|
| Habit reversal therapy (HRT) for tic disorder | A type of cognitive behavioral therapy. HRT for tic disorders increases awareness to the feelings and context associated with the urge to tic and implements competing and inconspicuous habits in its place. |
| Comprehensive behavioral intervention for tics (C-BIT) | Combines HRT and other approaches like education, awareness via self-monitoring, relaxation techniques, and sometimes situational changes. |
| What Seems to Work | |
| Exposure with response prevention (ERP) | Consists of repeated, prolonged exposures to stimuli that elicit discomfort and instructions to refrain from any behavior that serves to reduce discomfort. |
| Medication | Medications may be considered for moderate to severe tics causing severe impairment in quality of life or when co-occurring conditions that would also benefit from the medication are present. |
| Massed negative practice | Treatment involves children's over-rehearsal of target tic in high-risk situations. |
| What Does Not Work | |
| Deep brain stimulation | Surgical intervention; not recommended. |
| Repetitive transcranial magnetic stimulation (rTMS) | Safety in youth has not been established; not recommended. |
| Plasma exchange; Intravenous immunoglobulin (IVIG) treatment | Blood transfusions alter levels of plasma or immunoglobulin. While several of these treatments have been shown to be promising, they are not empirically supported and not recommended. |
| Dietary supplements (magnesium and vitamin B6); Special diets | Supplements may have the potential to negatively interact with other medications. Not recommended until safety in children is established. |

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

<http://www.aacap.org/>

American Academy of Family Physicians

Understanding Tics and Tourette's Syndrome

<https://www.aafp.org/afp/1999/0415/p2274.html>

American Psychiatric Association (APA)

<https://www.psychiatry.org/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>



SCHIZOPHRENIA

OVERVIEW

Schizophrenia is a brain-based disorder that causes strange thinking and unusual behavior. It is primarily characterized by psychosis, a condition in which thought and emotions are so impaired that contact is lost with external reality. In schizophrenia, psychosis often presents as hallucinations, delusions, and/or disorganized speech and thinking. Although schizophrenia can be treated, it is considered to be a life-long disorder.

Onset of schizophrenia typically occurs between age 16 and 30; the rate of onset increases during adolescence, peaking at age 30. Onset before age 18 is categorized as early-onset schizophrenia (EOS). EOS is rare and occurs in only 1 percent of people with schizophrenia (or less than .01 percent of the population). Onset before age 13 is categorized as childhood-onset schizophrenia (COS). This very early onset is exceedingly rare and much more severe than EOS. For the purposes of this section of the *Collection*, the terms schizophrenia and EOS will be used interchangeably.

Schizophrenia in youth is hard to diagnose. Its symptoms can mimic a host of other disorders, which makes misdiagnosis common. Many medical conditions, such as delirium, seizure disorders, central nervous system lesions, neurodegenerative disorders, and developmental disorders, can cause psychosis. Psychotic symptoms brought on by substance abuse should also be ruled out. Other conditions that should be ruled out prior to a diagnosis of schizophrenia include psychotic mood disorders, behavioral/emotional disorders, schizoaffective disorder, autism spectrum disorder, obsessive-compulsive disorder, and delusional disorders. Clinicians should also take care to differentiate true psychotic symptoms from overactive imaginations, idiosyncratic thinking, and perceptions caused by developmental delays and/or exposure to traumatic events.

The most common symptoms EOS are vivid hallucinations, disordered thinking, and flattened affect. Systematic delusions and catatonic symptoms are less common. Cognitive delays often co-occur with EOS, including memory, executive functioning, and attention deficits, as well as global impairments.

KEY POINTS

- Characterized by psychosis, which can present as hallucinations, delusions, or disorganized thinking.
- Onset before age 18 is rare.
- Often episodic in nature, with periods of wellness between episodes.
- Associated with an increased risk of suicide.
- No evidence-based treatments at this time; a combination of pharmacological and psychosocial therapies has the best results.

At onset of schizophrenia, children often show cognitive decline, social withdrawal, disruptive behavior disorders, difficulty in school, and speech and language problems. Signs of schizophrenia often present slowly over time, so parents often have difficulty recognizing psychotic symptoms in children with language delays and social withdrawal. Parents should look for unusual, suspicious, or paranoid thoughts along with language and social decline.

Schizophrenia should be diagnosed by a child or adolescent psychiatrist with special training in evaluating and diagnosing children with schizophrenia. In order to receive a diagnosis of schizophrenia, there must be ongoing signs for six months. In addition, hallucinations, delusions, or disordered speech must be present for at least one month. Common symptoms of schizophrenia are described in Table 1.

Although schizophrenia is a life-long disorder, it is episodic (periods of relative wellness followed by periods of illness). During their lifetimes, people with schizophrenia may become actively ill only once or twice or may have many more episodes. Unfortunately, residual symptoms may increase and ability to function may decrease after each active phase. It is important to try to avoid relapses by following the prescribed treatment. Currently it is difficult to predict at the onset how fully a person will recover.

Episodes of schizophrenia usually progress in phases. These phases are described in Table 2.

Youth suffering from EOS also have high rates of co-occurring disorders, including:

- Attention-deficit/hyperactivity disorder
- Depression
- Anxiety disorders
- Conduct disorder
- Oppositional defiant disorder

Because the presence of one or more co-occurring disorder can affect treatment, clinicians should perform a thorough assessment for other mental health disorders.

Between five and six percent of individuals with schizophrenia die of suicide, and approximately 20 percent attempt it. Even more of these individuals experience suicidal ideation (thoughts of suicide). According to the DSM-5, suicide risk is high throughout the life of both males and females. However, it may be highest in young males who also use or abuse drugs and similar substances. The likelihood of suicide is highest when a youth is in a depressive state or is experiencing depression-like symptoms, after a psychotic episode, or after being discharged from the hospital. Monitoring youth with EOS for suicide risk is extremely important. A review of suicide assessment tools is provided in the *Collection's* "Youth Suicide" section.

Table 1
Common Symptom of Schizophrenia

| Symptom | Description |
|---|---|
| Hallucinations <i>Children are more likely than adults to experience hallucinations.</i> | Hallucinations are seeing or hearing things that are not real. People who have hallucinations cannot usually distinguish them from real sights and sounds because they seem to be experienced through the senses. These experiences can cause extreme distress. It is important to note that hallucinations can indicate another mental health or sensory processing disorder. |
| Delusions <i>Children are less likely than adults to experience delusions.</i> | Delusions are false beliefs that a person holds in spite of overwhelming evidence that the belief is false. Some common delusions are listed below. <ul style="list-style-type: none"> • Belief that a person or group will harm, harass, or otherwise bother the individual (most common type of delusion) • Belief that certain gestures, comments, and environmental cues are directed at the individual • Individual believes he/she has exceptional abilities, wealth, or fame • Individual falsely believes someone is in love with him/her • Belief that a major catastrophe will occur • Focus on preoccupations on health and organ function • Belief that one is a religious figure |
| Disorganized speech | Speech is incoherent or non-linear. Disorganized speech indicates disordered thinking. |
| Disorganized or abnormal motor behavior | <ul style="list-style-type: none"> • Catatonia: Lack of response to environment; motor immobility; mutism • Excessive or unconventional motor behavior; unconventional verbal behaviors • Imitation of movements of others |
| Negative symptoms | <ul style="list-style-type: none"> • Flattened affect: Reductions in facial expression, eye contact, hand movements, and speech intonation; diminished speech • Lack of motivation • Inability to experience pleasure; lack of interest in social interactions |
| Associated symptoms <i>These symptoms can also be present in a variety of psychological or biological disorders.</i> | <ul style="list-style-type: none"> • Bizarre thoughts and ideas; odd behavior and speech • Unable to discern television and dreams from reality • Paranoia • Cognitive defects, such as problems with learning or understanding information, with memory, with focus or attention, or with completing tasks or making decisions • Unable to infer the intentions of others, which can lead to explanatory delusions • Lack of insight into illness (typically a symptom rather than a coping strategy) • Withdrawn and increased isolation • Decline in personal hygiene • Insomnia; daytime sleeping and nighttime activity • Lack of interest in or refusal of food • Problems with self-control • Hostility or aggression • Inappropriate affect: for instance, laughing at inappropriate times • Symptoms of depressive or anxiety disorders; extreme moodiness |

Table 2
Phases of Schizophrenia

| Phase | Description |
|-----------------|---|
| Prodromal Phase | <p>Before a child displays very obvious symptoms, they may decline in any of the following ways:</p> <ul style="list-style-type: none"> • Social function • Odd preoccupations • Unusual behaviors • Trouble in school • A lack of self-care |
| Active Phase | <ul style="list-style-type: none"> • Hallucinations • Delusions • Marked distortions in thinking • Disturbances in behavior and feelings |
| Residual Phase | <ul style="list-style-type: none"> • Listless • Trouble concentrating • Withdrawn • Other symptoms similar to Prodromal Phase |

CAUSES AND RISK FACTORS

It is likely that genetic, behavioral, and environmental factors influence the development of EOS. Environmental factors associated with schizophrenia include maternal malnutrition, infections during critical periods of fetal development, fetal hypoxia (a lack of oxygen to the brain), and other birth and obstetric complications. The literature shows no evidence that psychosocial factors cause schizophrenia.

Studies have shown that schizophrenia is highly influenced by genetics. Compared to the general population, the risk of being diagnosed with schizophrenia is five times higher for second-degree relatives of persons who have schizophrenia, ten- to fifteen-fold higher for first-degree family members, and forty to fifty times higher for identical twins or when both parents have schizophrenia.

TREATMENTS

Schizophrenia is treated with a combination of pharmacological and psychosocial therapies. Antipsychotic medications are usually prescribed immediately following a diagnosis of schizophrenia. Typically, treatment is continuous throughout a child's or adolescent's life, as relapses are linked with the discontinuation of treatment. After each subsequent relapse, it becomes more difficult to return to normal health and functioning, and the likelihood of more relapses increases. This decline can have irreversible effects; therefore, vigilance is essential.

Currently, there are no pharmacological or psychosocial therapies with enough evidence in youth samples to meet the highest standard for evidence-based treatments. Thus, research on treatment of EOS is recent and sparse. Table 3 summarizes treatments for EOS.

Table 3
Summary of Treatments for Early-Onset Schizophrenia

| What Works | |
|--|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Medication treatment with second-generation (atypical) antipsychotics | Risperidone Aripiprazole Quetiapine Paliperidone Olanzapine |
| Medication treatment with traditional neuroleptics/first generation antipsychotics | Molindone Haloperidol |
| Family psychoeducation and support | Helps to improve family functioning, problem solving and communication skills, and decrease relapse rates. |
| Cognitive behavioral therapy (CBT) | Includes social skills training, problem-solving strategies, and self-help skills. |
| Cognitive remediation | Pointed tasks to help improve specific deficiencies in cognitive, emotional, or social aspects of a patient's life. |
| Not Adequately Tested | |
| Electroconvulsive therapy (ECT) | Small electric currents are passed through the brain, intentionally triggering a brief seizure to reverse symptoms of certain mental illnesses. Unproven as effective in youth. Should only be used as a last effort after all risks are weighted against possible benefits. |
| What Does Not Work | |
| Psychodynamic therapies | Talk therapies that focus on a client's self-awareness and understanding of the influence of the past on present behavior. These therapies are considered to be potentially harmful for youth with schizophrenia. |

Pharmacological Treatments

Due to the limited number of controlled studies related to the efficacy and safety of psychopharmacological medications for youth with EOS that currently exist, pharmacological treatment of youth diagnosed with schizophrenia is modeled after treatment studies with adults. The most widely prescribed class of drugs for youth under 18 years of age are second-generation antipsychotics. The FDA has approved risperidone, aripiprazole, quetiapine, paliperidone, and olanzapine for the purposes of treating children over the age of 13, but these medications still do not meet the criteria for evidenced-based treatments.

Long-term monitoring of therapy compliance and side effects is essential for any treatment regimen requiring antipsychotic agents. Serious side effects of antipsychotics include seizures and neutropenia, a blood condition in which the cells that defend the body against bacterial infections (neutrophils) are significantly reduced. Cognitive side effects, such as problems with word retrieval, working memory, and cognitive dulling, can also occur. Other side effects for both first- and second-generation antipsychotics include weight gain, abnormal involuntary movements, and neuroleptic malignant syndrome.

Psychological Treatments

There are many different psychological treatment options for youth with schizophrenia. A proper psychological treatment paired with medication can be extremely effective in improving a patient's functioning (emotionally, socially, and cognitively).

The goal of therapy is both to help the youth return to a normal level of functioning and to promote the mastery of age-appropriate developmental tasks. Family involvement in treatment for EOS is especially important. Evidence suggests that family involvement can make treatment more effective and decrease the amount of time a youth spends in institutional care.

RESOURCES AND ORGANIZATIONS

American Academy of Child and Adolescent Psychiatry (AACAP)

Facts for Families: Schizophrenia in Children

http://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Schizophrenia-In-Children-049.aspx

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Brain & Behavior Research Foundation

<https://www.bbrfoundation.org/>

Mental Health America (MHA)

<http://www.mentalhealthamerica.net>

National Alliance for Mental Illness (NAMI)

Schizophrenia

<https://www.nami.org/Learn-More/Mental-Health-Conditions/Schizophrenia>

National Institute of Mental Health (NIMH)

<http://www.nimh.nih.gov>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov>



BIPOLAR AND RELATED DISORDERS

OVERVIEW

Families of children with bipolar disorder often notice the child has intense and extreme changes in mood and behavior. This may include the child varying between being excited, highly agitated, and very sad. The two “poles,” or extreme moods, of bipolar disorder are mania and depression. When children with bipolar disorder feel very happy or “up” and are much more active than usual, they are experiencing mania. A manic episode is a period of abnormally and persistently elevated mood. The child exhibits an increase in goal-directed activity or energy that lasts at least one week. Mania is often described as a period of euphoria or excessive cheerfulness, and often it is easily recognized. When the same child feels very sad and “down” and is much less active than usual, he or she is experiencing depression.

Some episodes may be mixed episodes, including both up and down symptoms. Children with bipolar disorder may have more mixed episodes than adults with bipolar disorder.

Table 1 describes some of the symptoms of both mania and depression. The list is not exhaustive.

There are three main types of bipolar disorder:

1. **Bipolar I disorder:** Requires a manic (or mixed) episode lasting at least one week, unless hospitalization is necessary. Depressive episodes are not required.
2. **Bipolar II disorder:** Requires major depressive episodes with at least one hypomanic episode (a lesser form of mania) lasting at least four days. There are no full manic or mixed manic episodes.
3. **Cyclothymic disorder:** Requires at least two years (one year in children and adolescents) of numerous periods of hypomanic symptoms that do not meet criteria for a hypomanic episode and numerous periods of depressive symptoms that do not meet criteria for a major depressive episode. Cyclothymic disorder is primarily a chronic, fluctuating mood disturbance.

KEY POINTS

- Characterized by episodic mood swings that can include:
 - Abnormally elevated mood (mania)
 - Pronounced sadness (depression)
 - Mixed episodes (both up and down symptoms)
- Many medical and mental health conditions have similar symptoms.
- Associated with an increased risk of suicide.
- No evidence-based treatments at this time; tailored treatment that includes mood stabilizing medication and/or psychotherapy has the best results.

Table 1
Manic and Depressive Symptoms

| Manic Symptoms | Depressive Symptoms |
|---|--|
| <ul style="list-style-type: none"> • Severe changes in mood to either unusually happy or silly, or very irritable, angry, or agitated • Unrealistic highs in self-esteem • Greatly increased energy and the ability to operate on little or no sleep for days • Increased talking • Increasingly distracted, moving from one thing to the next • Repeating high risk behavior | <ul style="list-style-type: none"> • Irritability, persistent sadness, frequent crying • Thoughts of death or suicide • No longer enjoys favorite activities • Frequent complaints of physical illness, like headaches • Decreased energy level • Major change in eating and sleeping patterns |

It is important to note that bipolar disorder in children and, to a lesser extent, in adolescents, can manifest in ways that do not always meet the full criteria described above. For instance, in adolescents, mania is commonly associated with psychotic symptoms (thought and emotions are so impaired that contact is lost with external reality), rapidly changing moods, and mixed manic and depressive features. Mania in younger children is usually defined by erratic changes in mood, energy levels, and behavior. Irritability and mixed manic/depressive episodes are usually more common than euphoria. Also, well-defined and discrete episodes of abnormal mood are often missing in children and adolescents. There is also sparse evidence of the validity of a bipolar diagnosis in pre-school aged children and that diagnosis should be made with extreme caution.

To further complicate diagnosis, there are many conditions and disorders that frequently co-occur with bipolar disorder, including:

- Attention-deficit/hyperactivity disorder (ADHD) (up to 90 percent co-occurrence)
- Anxiety disorders, like separation anxiety (up to 78 percent co-occurrence)
- Substance abuse
- Conduct disorders
- Other mental illnesses, including depression

In addition, many mental illnesses (including those listed above) and medical conditions (such as hyperthyroidism, epilepsy, or head trauma) can have symptoms similar to bipolar disorder, which can lead to misdiagnosis and unnecessary or too aggressive pharmacological treatment. For this reason, it is imperative that children exhibiting bipolar symptoms be thoroughly assessed by a mental health professional specializing in bipolar disorders in youth.

Families should be mindful of the signs and risk factors of bipolar disorder described in Table 2, and should seek assessment for the disorder if they notice any red flags.

Ongoing assessment of suicide risk is important due to the high risk of suicide attempts among youth with bipolar disorder. The lifetime risk of suicide in all individuals with bipolar disorder may be 15 times that of the general population. Information about suicide is provided in the “Youth Suicide” section of the *Collection*.

CAUSES AND RISK FACTORS

The causes of bipolar disorder aren't always clear, and scientists are continually researching possible causes and risk factors. Experts believe that bipolar and related disorders can be caused by several things, including:

- Genetics: A child with a parent or sibling with bipolar disorder is four times more likely to be diagnosed with the disorder. Having a parent or sibling who has schizophrenia is also a risk factor.
- Brain structure and function
- Anxiety disorders
- Gestational influenza: A child whose mother had influenza during pregnancy is four times more likely to be diagnosed with bipolar disorder

Table 2
Red Flags that Can Trigger Assessment for Bipolar Disorder

| Red Flag | Description | Reason |
|---|--|---|
| Family history of bipolar disorder | Bipolar disorder has a genetic contribution; family environment can amplify risk and affect treatment adherence and relapse | Five to 10 times increase for 1 st degree relative; 2.5 to 5 times for 2 nd degree relative; 2 times for “fuzzy” bipolar disorder in relative |
| Early onset depression | Onset less than 24 years of age; also, treatment resistant, recurrent, or atypical depression may be more likely to be bipolar | First clinical episode is often depression; 20% to 30% of depression ultimately shows a bipolar course |
| Antidepressant-coincident mania | Manic symptoms while being treated with antidepressants | The FDA recommends assessing for hypomania and family history of bipolar disorder before prescribing antidepressants |
| Episodic mood lability (marked fluctuation of mood) | Rapid switching between depressive and manic symptoms, depressive and manic symptoms at the same time | Common presentation; multiple episodes more suggestive of mood diagnosis |
| Episodic aggressive behavior | Episodic, high-energy, not instrumental or planned, reactive | Not specific to bipolar disorder but common |
| Psychotic features | True delusions/hallucinations in the context of mood | Delusions/hallucinations common during mood episode; bipolar more common as source of psychosis than schizophrenia in children |
| Sleep disturbance | Decreased need for sleep; less sleep but maintains high energy | More specific to bipolar disorder; indicates sleep hygiene treatment |

Source: Youngstrom, E., Jenkins, M. M., Jensen-Doss, A., & Youngstrom, J. K. (2012). Evidence-based assessment strategies for pediatric bipolar disorder. *Israel Journal of Psychiatry and Related Sciences*, 49(1), 15-27.

TREATMENT

Currently, there are no pharmacological or psychosocial therapies with enough evidence in youth samples to meet the standards for evidence-based treatments, although the treatments discussed in this section have been shown to be probably efficacious. Treatment should be tailored to the individual and based on several different factors, including treatment setting, the chronic nature of the disorder, the age of the child, and the family environment.

Table 3 summarizes the treatments for bipolar and related disorders.

Table 3
Summary of Treatments for Bipolar and Related Disorders

| What Works | |
|--|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Medication | Mood stabilizers (lithium)/Anticonvulsants Second-generation antipsychotics |
| Family-focused psychoeducational therapy (FFT) | Helps youth make sense of their illness and accept it and also to better understand use of medication. Also helps to manage stress, reduce negative life events, and promote a positive family environment. |
| Child- and family-focused cognitive behavioral therapy (CFF-CBT) | Emphasizes individual psychotherapy with youth and parents, parent training and support, and family therapy. |
| Multifamily psychoeducation groups (MFPG) | Youth and parent group therapy have been shown to increase parental knowledge, promote greater access to services, and increase parental social support for youth. |
| Not Adequately Tested | |
| Interpersonal social rhythm therapy (IPSRT) | Works to minimize the effects of life stressors by helping youth establish regular patterns of sleep, exercise, and social interactions. |
| Omega-3 fatty acids | Unclear if supplementation helps with depressive symptoms when used in conjunction with other treatments. |
| Topiramate Oxcarbazepine | Anticonvulsants; not proven to be effective in youth or adults. |
| Dialectical behavior therapy (DBT) | Family skills training and individual therapy; not proven to help with mania or interpersonal functioning. |

Pharmacological Treatments

The goal of pharmacological treatment for bipolar and related disorders is to immediately reduce the severity of symptoms. Pharmacotherapy, combined with psychotherapy, offers the best chance for symptom recovery. However, because few large-scale prospective studies have examined pharmacologic treatment for youth with bipolar and related disorders, many of these medications are used without specific FDA approval for youth.

Lithium is currently the most extensively studied medication for use with bipolar disorder. Lithium has been found to be effective in approximately 60-70 percent of adolescents and children with bipolar disorder and remains the first-line therapy in many settings. However, youth experience the same safety problems with lithium that adults may experience, such as toxicity and impairment of renal and thyroid functioning. Lithium is not recommended for families unable to keep regular appointments, which are necessary to ensure monitoring of serum lithium levels in the blood and to manage conflicting side effects. Relapse is also high for those youth who discontinue the medication.

Youth diagnosed with bipolar disorder and comorbid ADHD respond less favorably to lithium treatment than youth who do not have ADHD. However, mood stabilizers show better results than stimulants in youth with bipolar disorder and comorbid ADHD.

Unfortunately, mood stabilizers and atypical antipsychotics have a number of adverse side effects, including, but not limited to, weight gain, drowsiness, decreased motor activity, constipation, increased salivation, rigidity, and dystonia. It is very important that children on these medications be monitored for the development of serious side effects. These side effects need to be weighed against the dangers of the manic-depressive illness itself.

Psychosocial Treatments

Although no psychosocial treatments for bipolar disorder are considered evidence-based, recent evidence has shown that family-focused psychoeducational therapy (FFT), child- and family-focused cognitive behavioral therapy (CFF-CBT), and multifamily psychoeducation groups (MFPG) have promise when used in conjunction with pharmacological treatment. These three treatments have demonstrated symptom improvement and increased functioning in youth with bipolar disorder. The rationale behind these family-focused treatments are to give youth with bipolar disorder and their families knowledge and skills that could help limit the debilitating cycles of relapse and impairment that are characteristic of this disorder.

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

<http://www.aacap.org>

Bipolar Disorder: Parents' Medication Guide for Bipolar Disorder in Children, & Adolescents

<http://www.parentsmedguide.org/bipolarmedicationguide.pdf>

American Psychiatric Association (APA)

<https://www.psychiatry.org>

American Psychological Association (APA)

<http://www.apa.org/>

Association for Behavioral and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

American Foundation for Suicide Prevention (AFSP)

<https://afsp.org/>

Anxiety and Depression Association of America (ADAA)

<https://adaa.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Depression and Bipolar Support Alliance (DBSA)

<http://www.dbsalliance.org>

Effective Child Therapy

<http://effectivechildtherapy.org/>

Juvenile Bipolar Research Foundation

<https://www.jbrf.org/about-jbrf>

Mental Health America (MHA)

Bipolar Disorder in Children

<http://www.mentalhealthamerica.net/conditions/bipolar-disorder-children>

National Alliance on Mental Illness (NAMI)

Bipolar Disorder

<https://www.nami.org/Learn-More/Mental-Health-Conditions/Bipolar-Disorder/Support>

National Institute of Mental Health (NIMH)

Bipolar Disorder in Children and Teens

<https://www.nimh.nih.gov/health/publications/bipolar-disorder-in-children-and-teens/index.shtml>

Ryan Licht Sang Bipolar Foundation

<http://www.ryanlichtsangbipolarfoundation.org>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>



DEPRESSIVE DISORDERS

OVERVIEW

Like adults, children and adolescents experience depression with the accompanying feelings of hopelessness, guilt, or sadness. However, depression in children and adolescents can manifest in different ways than it does in adults. For instance, in adolescents, an irritable mood rather than a sad or dejected mood often predominates.

Approximately 60 percent of adolescents with depression have recurrences throughout adulthood.

The emotional and behavioral dysfunction associated with these mood disorders can cause impairments across areas of functioning, including academic and social arenas.

There are three major categories of depressive disorders: disruptive mood dysregulation disorder, major depressive disorder, and persistent depressive disorder (dysthymia). Common symptoms are listed in Table 1.

Because depressive disorders can result in suicide, depression among children and adolescents is of grave concern. Information about suicide is provided in the “Youth Suicide” section of the *Collection*.

KEY POINTS

- Characterized by persistent sadness, hopelessness, guilt, apathy, and/or irritability.
- Associated with an increased risk of suicide. For this reason, early intervention is critical.
- A combination of cognitive behavioral therapy and medication therapy, (fluoxetine) usually offers maximum therapeutic benefits.

Disruptive Mood Dysregulation Disorder

This diagnosis is new to the *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5). It was created to reduce the risk of overdiagnosis and treatment of bipolar disorder in children.

The core feature of disruptive mood dysregulation disorder is chronic, severe, persistent irritability, which can include frequent temper outbursts. This irritable or angry mood must be characteristic of the child, be present most of the day, nearly every day, and noticeable by others in the child’s environment. Symptoms begin between age six and ten, are present for at least one year, and occur in more than one place (at home, school, and/or with peers). Disruptive mood dysregulation disorder often co-occurs with oppositional defiance disorder (ODD), and frequently occurs with other disorders as well, including behavior, mood, anxiety, and autism spectrum disorder diagnoses.

Table 1
Types and General Symptoms of Depressive Disorders

| Major Depressive Disorder |
|---|
| <p>Experiences symptoms most of the time for at least two weeks.</p> <ul style="list-style-type: none"> • Sadness • Hopelessness • Feelings of worthlessness • Loss of feelings of pleasure • Guilt (preschool feature) • Loss of interest in enjoyable activities (preschool feature) • Irritability (adolescent feature) • Change in weight/failure to gain as expected (preschool feature) • Sleep disturbance (preschool feature) • Unintentional or purposeless motions • Fatigue and/or excess sleeping (adolescent feature) • Difficulty thinking or concentrating (preschool feature) • Recurrent thoughts of death or suicide (adolescent feature) • Deterioration in school or home functioning • Persistent physical complaints (age 6-9 feature) • Abusing substances (adolescent feature) • More accident prone than usual (preschool feature) • Develops phobias (preschool feature) • Increased aggression (age 6-9 feature) • Clings to parents or avoids new events and people (age 6-9 feature) |
| Persistent Depressive Disorder (Dysthymia) |
| <p>Experiences symptoms for most of the day, for more days than not, for at least one year. Symptoms are not as severe as those seen in major depression.</p> <ul style="list-style-type: none"> • Altered appetite (eating too much or too little) • Sleep disturbance • Fatigue • Low self-esteem • Hopelessness |
| Disruptive Mood Dysregulation Disorder |
| <p>Symptoms begin between age six and ten, are present for at least one year, and occur in more than one place (at home, school, and/or with peers).</p> <ul style="list-style-type: none"> • Severe temper outbursts at least three times per week • Sad, irritable, or angry mood almost daily • Reactions to adverse events is bigger than expected |

Major Depressive Disorder

Major depressive disorder is characterized by a period of at least two weeks during which the youth experiences sadness, hopelessness, guilt, loss of interest in activities that are usually enjoyable, and/or irritability most of the time. Insomnia or fatigue is often the first noticeable and complained of symptom.

It is important to note that the youth's mood must differ from his or her usual mood and cannot be attributable to bereavement, a general medical condition, and/or substance abuse, although those conditions may co-occur and even contribute to depression.

About 40 to 90 percent of youth with major depressive disorder have at least one other psychiatric disorder. The most commonly co-occurring disorders are persistent depressive disorder (dysthymia), anxiety disorders, disruptive disorders, and substance abuse disorders. Depression is more likely to begin after the onset of the comorbid disorder, with the exception of substance abuse, which tends to occur after the onset of depression.

Persistent Depressive Disorder (Dysthymia)

Persistent depressive disorder (dysthymia) is a depressive disorder in which the symptoms are chronic and persistent but less severe than major depressive disorder. The disorder occurs when youth experience a sustained depressed mood for most of the day, for more days than not, for at least one year.

Because persistent depressive disorder is a chronic disorder, youth often consider their symptoms a part of who they are and do not report them unless asked directly.

CAUSES AND RISK FACTORS

The exact causes of depressive disorders are not known. There is evidence, however, that genetics contributes to a child's vulnerability to a depressive disorder. Other contributing factors are environment and biology (neurotransmitters, hormones, and brain structure).

EVIDENCE-BASED TREATMENTS

This section will focus on treatments that can apply to the most commonly diagnosed forms of depression among children adolescents: major depressive disorder and persistent depressive disorder (dysthymia). Research has shown a combination of the psychosocial and pharmaceutical treatments offers maximum therapeutic benefits.

Because youth who experience the onset of depressive disorders at a younger age typically have a worse prognosis, early intervention is critical to prevent additional functional breakdown, relapse, and suicidal behavior. Tables 2 and 3 summarizes the treatments for depressive disorders in children and adolescents.

Table 2
Summary of Treatments for Children with Depression

| What Works | |
|--|---|
| Stark's cognitive behavioral therapy (CBT) | Stark's CBT (child only or child plus parent) includes mood monitoring, mood education, increasing positive activities and positive self-statements, and problem solving. |
| Fluoxetine in combination with CBT | Fluoxetine, a selective serotonin reuptake inhibitor (SSRI), is the only antidepressant approved by the FDA for use in children (eight years old or older) for depression. For moderate to severe depression, fluoxetine in combination with psychosocial therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| What Seems to Work | |
| Penn prevention program (PPP) | PPP is a CBT-based program that targets pre-adolescents and early adolescents who are at risk for depression. |
| Self-control therapy | Self-control therapy is a school-based CBT that focuses on self-monitoring, self-evaluating, and causal attributions. |
| Behavioral therapy | Behavioral therapy includes pleasant activity monitoring, social skills training, and relaxation. |

Psychosocial Treatments

The evidence-based psychological treatments for depressive disorders are cognitive behavioral therapy (CBT) and interpersonal therapy (IPT). Research indicates that treatment can be effective regardless of where it is provided (school, community clinics, primary care clinics, hospitals, or research settings).

Pharmacological Treatments

Currently, only one pharmacological treatment has been approved for use with youth with depressive disorders by the Food and Drug Administration (FDA). This medication, fluoxetine (a selective serotonin reuptake inhibitor [SSRI]), has been approved by the FDA for treating children eight years of age or older. More research has been completed on fluoxetine than any other SSRI.

There has been considerable debate about the use of antidepressants to treat youth with depression, specifically whether their use increases the risk of suicidal behaviors. U.S. manufacturers are now required by the FDA to place a “black box” warning label on antidepressant medications prescribed for youth. A more detailed discussion of the use of antidepressants to treat children and adolescents is provided in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

Table 3
Summary of Treatments for Adolescents with Depression

| What Works | |
|---|---|
| Cognitive behavioral therapy (CBT) provided in a group setting | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |
| Interpersonal therapy (IPT) | In IPT, the therapist and patient address the patient's interpersonal communication skills, interpersonal conflicts, and family relationship problems. |
| Fluoxetine in combination with CBT | Fluoxetine, a selective serotonin reuptake inhibitor (SSRI), is the only antidepressant approved by the FDA for use in children (eight years old or older) for depression. For moderate to severe depression, fluoxetine in combination with psychosocial therapy may be warranted. However, because SSRIs can increase suicidal behavior in youth, children taking fluoxetine must be closely monitored by a mental health professional. |
| What Seems to Work | |
| CBT in a group or individual setting with a parent/family component | CBT for depression focuses on identifying thought and behavioral patterns that lead to or maintain the problematic symptoms. |
| Adolescent coping with depression (CWD-A) | CWD-A includes practicing relaxation and addressing maladaptive patterns in thinking, as well as scheduling pleasant activities, and learning communication and conflict resolution skills. |
| Interpersonal psychotherapy for depressed adolescents (IPT-A) | IPT-A addresses the adolescent's specific interpersonal relationships and conflicts, and helps the adolescent be more effective in their relationships with others. |
| Physical exercise | Physical exercise has shown promise in improving symptoms of depression in adolescents. Group-based and supervised light- or moderate-intensity exercise activities 3 times a week for a period of between 6 to 11 or 12 weeks may bring about an improvement in depression. |
| Not Adequately Tested | |
| Dietary supplements | Supplements such as St. John's Wort, SAM-e, and Omega-3 have not been adequately tested and may have harmful side effects or interact with other medications. Parents should discuss supplement use with a mental health care professional. |
| What Does Not Work | |
| Tricyclic antidepressants | These antidepressants can have problematic side effects and are not recommended for children or adolescents with depression. |

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry

Depression Resource Center

http://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Depression_Resource_Center/Home.aspx

American Psychiatric Association

<https://www.psychiatry.org/>

American Psychological Association

<http://www.apa.org/>

Anxiety and Depression Association of America (ADAA)

<https://adaa.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org>

Mental Health America

Depression in Teens

<http://www.mentalhealthamerica.net/conditions/depression-teens>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>



ANXIETY DISORDERS

OVERVIEW

It is normal for all children to experience anxiety. Most young children have fears about the dark, storms, animals, separation, or strangers. The difference between regular anxiety and an anxiety disorder is that an anxiety disorder is debilitating. It leaves the child unable to function in a normal, productive manner. When both anxiety and the impairment of normal activities are evident, an anxiety disorder may be present.

If the child's fears or anxieties are frequent, severe, and interfere with the child's life activities, the family should seek an evaluation by a qualified mental health professional or a child and adolescent psychiatrist. Youth with anxiety problems experience significant and often lasting impairment, such as poor performance at school and work, social problems, and family conflict. Early intervention can prevent these complications.

There are several different types of anxiety disorders. General symptoms of each are outlined in Table 1. The *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5) no longer considers obsessive-compulsive disorder (OCD) or post-traumatic stress disorder (PTSD) as anxiety disorders. These disorders will be discussed in separate sections of the *Collection*.

Youth diagnosed with an anxiety disorder may also have one or more other mental health disorders, such as attention-deficit/hyperactivity disorder (ADHD), conduct disorder, depression, or another anxiety disorder. In addition, anxiety sometimes precedes the onset of major depressive disorder. When depression and anxiety occur together, there is a significantly higher risk for impairment.

Substance use disorder may also co-occur with anxiety disorders. Older youth may use alcohol and other substances to reduce the symptoms of anxiety. This practice is known as self-medication. Self-medication can be extremely detrimental because the use or abuse of substances can ultimately worsen symptoms, and certain substances may actually generate symptoms of anxiety.

KEY POINTS

- Characterized by anxiety that impairs normal functioning and impacts quality of life.
- Often co-occurs with other mental health disorders and can precede depression.
- Cognitive behavioral therapy is well established as an effective treatment. Medication therapy (SSRIs) is also evidence-based.

Table 1
Types and General Symptoms of Anxiety Disorders

| |
|---|
| Separation Anxiety Disorder |
| <ul style="list-style-type: none"> • Constant thoughts and fears regarding well-being of parents and caretakers • Refuses to go to school • Frequent stomach aches and other physical complaints when separation from major attachment figure occurs or is anticipated • Extreme worries about sleeping away from home • Panic or tantrums at times of separation from parent(s) or attachment figures • Persistent and excessive fears of being apart from major attachment figure • Recurring separation-themed nightmares |
| Social Anxiety Disorder/Social Phobia |
| <ul style="list-style-type: none"> • Extreme fear of meeting or talking to people • Avoids social situations or has few friends • The anxiety must occur in peer settings and not just in interactions with adults |
| Specific Phobia |
| <ul style="list-style-type: none"> • Extreme fear of a specific thing or situation (e.g. animals, needles, flying) • Fear must cause significant distress and interfere with usual activities |
| Generalized Anxiety Disorder |
| <ul style="list-style-type: none"> • Excessive worrying about things before they happen • Restlessness or feeling on edge • Sleep disturbance |
| Panic Disorder |
| <p>Abrupt change from calm to anxious state reaching its peak within minutes, with symptoms including:</p> <ul style="list-style-type: none"> • Intense fearfulness • Feeling short of breath or smothered • Dizziness • Trembling or shaking • Fear of dying or losing control (going crazy) • Parathesia (numbness or tingling sensations) |
| Agoraphobia |
| <p>Consistent significant fear about situations such as the following:</p> <ul style="list-style-type: none"> • Using public transportation • Being in open spaces • Being in enclosed spaces • Standing in line or being in a crowd • Being outside of the home alone • The fear of a situation is out of proportion to the actual danger • The fear causes clinically significant distress or impairment in functioning. |

CAUSES AND RISK FACTORS

Risk factors for anxiety disorders include:

- Having some biological predisposition to anxiety
- Having a psychological vulnerability related to “feeling” an uncontrollable or unpredictable threat or danger
- Having a direct experience with anxiety-provoking situations

When these three factors combine, a child is considered to be especially at risk for developing anxiety problems.

EVIDENCE-BASED TREATMENTS

The treatment of anxiety disorders in youth is usually multimodal in nature. Wide-ranging treatments have been described in the literature, but only two primary treatments have been designated as evidence-based: Behavioral and cognitive behavioral therapy (CBT), and treatment with selective serotonin reuptake inhibitors (SSRIs). It is worth noting that CBT has been tested and found to be effective for anxiety disorders in youth in over 35 separate randomized trials. Treatments are outlined in Table 2.

Psychological Treatments

Behavioral therapy and cognitive behavioral therapy (CBT) are the most studied and best-supported treatments for helping youth diagnosed with an anxiety disorder. These approaches, though diverse, typically include what is called exposure therapy. Exposure treatment involves exposing youth in a graduated fashion to the non-dangerous situations that they fear, with a focus on having them learn that their anxiety will decrease over time. As an example, youth afraid of talking to peers would practice conversations numerous times until they felt less anxious about doing so. Often, exposure therapy involves using a hierarchy, or fear ladder, such that youth may be exposed to moderately stressful situations and work towards more difficult ones. This approach allows these youth to experience mastery and increases their self-confidence.

Other elements common to behavioral therapy and CBT include psychoeducation, relaxation, and cognitive skills. Psychoeducation entails teaching older youth and parents about what causes anxiety, the effects of anxiety, how to distinguish between problematic and non-problematic anxiety, and how to overcome problematic anxiety. Psychoeducation also teaches youth and parents to monitor levels of anxiety across a variety of situations. Both forms of therapies often use praise and/or rewards to encourage the youth's progress. Both also include relationship building between the therapist and the parents and children. Relaxation entails teaching youth how to relax through breathing exercises or by alternating muscle tension and release. Cognitive skills involve teaching youth how to observe and change their thinking patterns so they can change how they feel and reduce their feelings of anxiety. Most versions of behavioral therapy and CBT include parental involvement, with some versions involving the parents attending all sessions with their children.

Both behavioral therapy and CBT have been found to be helpful to youth of all ages and can be administered in individual and group settings. They have also been delivered with good effects in schools, clinics, hospitals, daycare centers, and homes.

Pharmacological Treatments

Selective serotonin reuptake inhibitors (SSRIs) are generally the first pharmacological treatment for children with anxiety disorders. However, the FDA issued a public health advisory regarding the safety of SSRIs in children with major depressive disorder due to the risk of increased suicide attempts and suicidal ideation. In addition, although some antidepressants are approved by the FDA for use in children, not all are. For more information see the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

Table 2
Summary of Treatments for Youth with Anxiety Disorders

| What Works | |
|--|--|
| Behavioral & cognitive behavioral therapy (CBT) | Treatment that involves exposing youth to the (non-dangerous) feared stimuli and challenging the cognitions associated with the feared stimuli with the goal of the youth’s learning that anxiety decreases over time. |
| Selective serotonin reuptake inhibitors (SSRIs) | Treatment with certain SSRIs have been proven to help with anxiety; however, SSRIs may increase suicidal ideation in some youth. |
| What Seems to Work | |
| Educational support | Psychoeducational information on anxiety provided to parents, usually in a group setting. |
| Benzodiazepines | While proven effective, not a first choice treatment because of an increase in the risk of behavioral disinhibition. |
| Computer-based behavioral & cognitive behavioral therapy (CBT) | CBT administered electronically to eliminate long waiting periods or lack of clinical experts in a given area. |
| Not Adequately Tested | |
| Play therapy | Therapy using self-guided play to encourage expression of feelings and healing. |
| Antihistamines or herbs | No controlled studies on efficacy. |
| Psychodynamic therapy | Therapy designed to uncover unconscious psychological processes to alleviate the tension thought to cause distress. |
| Neurofeedback | A type of non-invasive brain training that enables an individual to learn how to change mental and/or physiological activity. |
| Antipsychotics/neuroleptics | High level of risk of impaired cognitive functioning and tardive dyskinesia with long-term use; contraindicated in youth who do not also have Tourette’s syndrome or psychosis. |

RESOURCES AND ORGANIZATIONS

American Academy of Child, & Adolescent Psychiatry (AACAP)

Anxiety Disorders Resource Center

https://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Anxiety_Disorder_Resource_Center/Home.aspx

Anxiety and Depression Association of America (ADAA)

<https://adaa.org/>

Association for Applied Psychophysiology and Biofeedback (AAPB)

<https://www.aapb.org>

Association for Behavior and Cognitive Therapies

<http://www.abct.org/Home/>

Mental Health America

<http://www.mentalhealthamerica.net/conditions/anxiety-disorders>

National Anxiety Foundation

<http://www.nationalanxietyfoundation.org/>

National Institute of Mental Health (NIMH)

<https://www.nimh.nih.gov>

Social Phobia/Social Anxiety Association

<http://socialphobia.org/>

Society of Clinical Child & Adolescent Psychology

<https://www.clinicalchildpsychology.org/>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov/>

VIRGINIA RESOURCES AND ORGANIZATIONS

University of Virginia Health System

Anxiety Disorders in Children

<https://childrens.uvahealth.com/services/pediatric-psychiatry/anxiety-disorders>

Virginia Commonwealth University Medical Center

Children's Mental Health Resource Center

<https://www.chrichmond.org/Children's-Mental-Health-Resource-Center.htm>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>



OBSESSIVE–COMPULSIVE AND RELATED DISORDERS

Obsessive-Compulsive Disorder • Body Dysmorphic Disorder
Hoarding Disorder • Trichotillomania • Excoriation Disorder

OVERVIEW

Obsessive-compulsive and related disorders (OCDs) is the umbrella term that describes disorders that have several features in common, including obsessions and compulsions.

Obsessions are persistent and intrusive thoughts, ideas, impulses, or images that result in anxiety. Often, the obsessive thoughts or worries are irrational and/or unrealistic. Compulsions are a temporary escape from the stress and anxiety associated with obsessions, and usually take the form of overt behavioral acts or rituals.

Figure 1 provides additional information about obsessions and compulsions.

Figure 1
Obsessions and Compulsions

| | |
|--------------------|--|
| Obsessions | <p>Recurrent and persistent thoughts, urges, or images the youth deems intrusive and unwanted at some point in the experience. Such thoughts, urges, or images are distressing and cause anxiety.</p> <p>The youth attempts to ignore or suppress the thoughts, urges, or images, or alternatively, neutralizes them with another thought or action (e.g., a compulsion).</p> |
| Compulsions | <p>Repetitive behaviors or mental acts the youth feels compelled to perform in response to an obsession.</p> <ul style="list-style-type: none">• Repetitive behaviors may include handwashing, ordering, checking, hoarding, and hair pulling, skin picking, or other body-centric behaviors.• Mental acts may include praying, counting, and repeating words silently. <p>These behaviors/actions are performed in an attempt to prevent or reduce anxiety, distress, or a feared event. Actions are excessive and may not realistically be connected to that which they aim to prevent.</p> |

Most youth experience the types of intrusive thoughts that cause distress in youth with OCDs. These thoughts may originate from a traumatic experience, illness, or information from others (e.g., family, friends, news reports, etc.). However, youth with OCDs may experience shame, guilt, or fear in response to these thoughts and have difficulty dismissing them. As a result of these unpleasant and/or fearful feelings, the youth attempts to escape or avoid the fear through various behaviors. If these behaviors become associated with the reduction in fear, they are reinforced—even if they do not directly cause fear to be reduced.

Younger children with OCRDs can present differently than adults. Adults with OCRDs often recognize that their behaviors are abnormal and problematic. However, due to undeveloped cognitive abilities, children with OCRDs may not understand that their behaviors are abnormal. In addition, they often cannot explain why it is important to complete a compulsion and may only report a vague sense that “something bad might happen.” Finally, their distress at not being able to complete a compulsion can manifest as tantrums or angry outbursts.

The impairment caused by OCRDs is significant. Because compulsions serve as the primary coping mechanism, youth with OCRDs who experience increased levels of distress will respond by increasing the intensity and/or magnitude of their compulsion. Thus, these youth may spend more and more time engaging in their rituals, which can interfere with school, work, and social functioning. Accordingly, youth with OCRDs may be reluctant to attend school for fear of embarrassment, and they often withdraw from social activities. Youth with OCRDs also possess a higher risk for comorbid anxiety disorders (e.g., social anxiety and panic disorder) and depression. While symptoms may fluctuate, the overall trend in symptom severity increases over the lifetime.

The main types of OCRDs are obsessive-compulsive disorder, body dysmorphic disorder, hoarding disorder, trichotillomania (hair-pulling disorder), and excoriation (skin-picking disorder). Because each category has different treatments, each will be discussed in its own section of this chapter.

As many as an estimated 10 percent of patients with OCRDs attempt suicide. While this risk does not solely affect children and adolescents, families should be aware of this risk and monitor their children for signs of suicidal ideation (thinking about suicide). For additional information on this topic, families should consult the “Youth Suicide” section of the *Collection*.

CAUSES AND RISK FACTORS

OCRDs tend to run in families, but they may develop even without any previous family history. The biological risk factors of OCRDs are genetic and have a neurological basis. OCRDs are not caused by parenting or other family problems. However, the way a family reacts to a youth with an OCRD can affect the disorder by either increasing or decreasing anxiety. For instance, one study found that parents of children with OCRDs (compared to parents of non-OCRD children) did not as frequently use problem-solving with their children, did not encourage their children’s independence, and did not have as much confidence in their children’s abilities.¹ In addition, physical and sexual abuse or severe trauma may contribute to the likelihood of developing the disorder.

PANDAS

There is evidence that a subset of children with obsessive-compulsive disorder developed symptoms after an infection of Group A beta hemolytic streptococcus (i.e., strep throat) or Sydenham’s chorea, a variant of rheumatic fever. This is called pediatric autoimmune neuropsychiatric disorder associated with strep (PANDAS). PANDAS is typically treated with antibiotics. While PANDAS is well accepted by some, there are still dissenters.

¹ Barrett, P., Shortt, A., & Healy, L. (2002). Do parent and child behaviours differentiate families whose children have obsessive-compulsive disorder from other clinic and non-clinic families? *Journal of Child Psychology and Psychiatry*, 43, 597-607.

OBSESSIVE-COMPULSIVE DISORDER

Obsessive-compulsive disorder is characterized by elevated anxiety or distress caused by uncontrollable and intrusive thoughts (called obsessions) and repetitive, ritualistic behaviors (called compulsions). Obsessions and/or compulsions that take up a significant portion of the youth's day and that cannot be attributed to any other disorders are the hallmark of obsessive-compulsive disorder. Figure 1 in the Overview section details additional information about obsessions and compulsions.

The first challenge in diagnosing a child with obsessive-compulsive disorder is distinguishing developmentally appropriate beliefs and behaviors from those symptomatic of obsessive-compulsive disorder. For example, youth with obsessive-compulsive disorder may fear that, by merely thinking a thought (e.g., hurting a loved one), they will cause it to happen. In children, it is important to differentiate developmentally normal magical thinking from pathological beliefs that drive compulsions and cause distress. For instance, young children may insist on sameness and order or adhere to rigid routines, such as elaborate bedtime rituals, as part of normal development in early childhood, reflecting the need for mastery and control.

Assessment of obsessive-compulsive disorder should follow general diagnostic practices, including obtaining complete developmental, medical, and family histories; evaluation of psychosocial functioning across multiple domains (e.g., family, friends, school, and home); and history of current and past symptoms. Both the parents and the child should complete diagnostic interviews to determine mental rituals and/or obsessions that the parent might not be aware of and behavior problems that the youth may be reluctant to report.

KEY POINTS

- **Characterized by:**
 - **Uncontrollable thoughts that cause distress (obsessions), and**
 - **Repetitive, ritualistic behavior meant to alleviate distress (compulsions).**
- **Evidence-based treatments include:**
 - **Cognitive behavioral therapy, which can involve the family and/or include exposure and response prevention therapy.**
 - **Medication therapy with approved SRIs or SSRIs.**

EVIDENCE-BASED TREATMENTS FOR OBSESSIVE-COMPULSIVE DISORDER

Effectively treating obsessive-compulsive disorder in youth is crucial to aiding in their lifelong functioning. Individual features of obsessive-compulsive disorder may have important implications for treatment. Mild obsessions or compulsions that are not the source of substantial distress or impairment may warrant monitoring over time. If such obsessions or compulsions are related to external or developmental stressors, psychotherapy or other psychosocial interventions targeted to these stressors may be useful. Treatments for obsessive-compulsive disorder are discussed in Table 1.

Table 1
Summary of Treatments for Obsessive-Compulsive Disorder

| What Works | |
|--|--|
| Cognitive behavioral therapy (CBT) with exposure and response prevention (ERP) | Treatment path with a consistent and compelling relationship between the disorder, the treatment, and the specified outcome. Combines training with exposure and preventing the accompanying response. |
| Family-focused individual CBT | Individual CBT that includes a focus on family involvement. It should be noted that the distinction of family focused here is meant to imply a format for treatment delivery. |
| Serotonin reuptake inhibitors (SRIs) | Clomipramine: Approved for children aged ten and older. Recommend periodic electrocardiographic (ECG) monitoring. |
| Selective serotonin reuptake inhibitors (SSRIs) | Fluoxetine (Prozac): Approved for children aged eight and older Sertraline (Zoloft): Approved for children aged six and older Fluvoxamine (Luvox): Approved for children aged eight and older |
| What Seems to Work | |
| Family focused group CBT | Studies show promising results but there have only been a small number of studies. However, each study addresses complex comorbidity and issues impacting community-based treatment. |
| Not Adequately Tested | |
| CBT without ERP Psychodynamic therapy Client-centered therapy | Systematic controlled studies have not been conducted using these approaches. |
| Technology-based CBT | Results show preliminary support for telephone CBT and web-camera CBT. Although these results are encouraging, caution must be taken due to the small sample sizes and lack of active control groups. |
| What Does Not Work | |
| Antibiotic treatments | Antibiotic treatments are only indicated when the presence of an autoimmune or strep-infection has been confirmed and coincided with onset or increased severity of obsessive-compulsive disorder symptoms (PANDAS). |
| Herbal therapies | Herbs, such as St. John's Wort, have not been rigorously tested and are not FDA approved. In some instances, herbal remedies may make symptoms worse or interfere with medications. |

Psychosocial Treatments

Cognitive behavioral therapy (CBT) that includes exposure and response prevention (ERP) therapy is the clinical standard first treatment path for obsessive-compulsive disorder in youth. Research suggests that ERP-based CBT may be more effective than pharmacological treatments. Both individual and individual family-based CBT treatments have been shown to be effective.

Clinicians should treat mild to moderate cases of obsessive-compulsive disorder youth with CBT, and for moderate to severe cases, CBT should accompany pharmacotherapy.

Pharmacological Treatment

Although traditionally used to treat depression, three selective serotonin reuptake inhibitors (the SSRIs fluoxetine (Prozac), sertraline (Zoloft), and fluvoxamine (Luvox)) and one serotonin reuptake inhibitor (the SRI clomipramine) are approved by the FDA for treatment of obsessive-compulsive disorder in youth.

While these medications may be helpful in conjunction with CBT treatments, they are not without risks and side-effects. For instance, in high doses, clomipramine has been associated with seizures and electrocardiographic (ECG) changes. Youth taking clomipramine should receive periodic ECG monitoring. Other side effects of clomipramine include dry mouth, constipation, dizziness, postural hypotension, sweating, and sedation.

There has also been greater awareness of an increased risk of suicidal ideation in youth taking antidepressants, including SSRIs. These risks must be weighed against the potential benefit from the medication when making treatment decisions. Youth taking these medications should be monitored for potential medical or psychological side-effects throughout treatment, particularly if other medications are also prescribed. The interaction of medications is poorly researched, particularly in children and adolescents; therefore, combinations of medications should be carefully considered. For additional information on this topic, please refer to the *Collection's* section "Antidepressants and the Risk of Suicidal Behavior."

BODY DYSMORPHIC DISORDER

Body dysmorphic disorder causes affected youth to perceive deficits in their physical appearance (concerns about weight or body fat are related to eating disorders, not body dysmorphic disorder). However, the body imperfections characterizing body dysmorphic disorder are either not observable or only slightly observable to others. A child or adolescent with body dysmorphic disorder may check the mirror, groom excessively, skin pick, and/or seek reassurance repetitively. Moreover, the child may compare his or her appearance to others. Muscle dysmorphia is a form of body dysmorphic disorder evidenced by a concern that one is too small or not muscular enough.

KEY POINTS

- **Characterized by obsessions and compulsions related to a perceived physical deficits (not including body weight).**
- **Physical deficits are not readily perceivable to others.**
- **No evidence-based treatments at this time, but cognitive behavioral therapy and medication therapy (SSRIs) show promise.**

Males and females are equally likely to present with body dysmorphic disorder symptoms. The median onset age is 15 years; however, the most common onset age is 12 to 13 years. Almost two thirds of those with body dysmorphic disorder experience onset prior to age 18. These individuals are more likely to have a gradual onset and are more likely to attempt suicide. Families should be cognizant of this slow onset possibility.

It is important that the clinician distinguishes normal adolescent concerns from body dysmorphic disorder concerns. In addition, developmental changes in the adolescent brain may contribute to the onset of body dysmorphic disorder.² These changes increase adolescents' self-consciousness and awareness of social status. Therefore, body dysmorphic disorder may be a disordered response to the psychological, social, and physical changes of adolescence itself.

TREATMENT FOR BODY DYSMORPHIC DISORDER

Unfortunately, there are no evidence-based treatments yet available for youth with body dysmorphic disorder. CBT shows promise because of its effectiveness with similar disorders, as does pharmacotherapy. Treatments are presented in Table 2.

Table 2
Summary of Treatments for Body Dysmorphic Disorder

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| Not Adequately Tested | |
| Selective serotonin reuptake inhibitors (SSRIs) | Possibly efficacious because of effectiveness with similar disorders. |
| Cognitive behavioral therapy (CBT) | Shows promise because of effectiveness with similar disorders. |

² Smith, A. R. (2011). When body image becomes a disorder. Retrieved from https://www.counseling.org/docs/default-source/vistas/vistas_2011_article_09.pdf?sfvrsn=11http://counselingoutfitters.com/vistas/vistas11/Article_09.pdf

HOARDING DISORDER

Hoarding disorder is characterized by ongoing difficulty discarding or parting with possessions, regardless of value; perceived need to save the items; and distress associated with discarding them. Individuals with hoarding disorder accumulate and retain so many items that they congest their living area and substantially compromise the use of the retained items.

Hoarding disorder begins to present symptoms around 11 to 15 years of age, begins to interfere with life around the mid-20s, and causes clinically significant impairment by the mid-30s.

Hoarding can be distinguished from collecting by analyzing how the youth views his or her possessions. Generally, collectors are proud of their possessions and experience joy in displaying and discussing them. Alternatively, those who hoard are embarrassed about their possessions and feel uncomfortable when others see them. Clutter often replaces livable space, and the owner is sad or ashamed after acquiring additional items. Debt frequently accompanies hoarding disorder.

KEY POINTS

- **Characterized by overaccumulation of items and difficulty parting with items, which often causes embarrassment and distress.**
- **No evidence-based treatments at this time, but cognitive behavioral therapy tailored to hoarding seems to work.**

TREATMENTS FOR HOARDING DISORDER

Unfortunately, no treatments that meet the level of evidence-based standards are available for youth with hoarding disorder. Historically, hoarding as a symptom of an OCD did not react well to medication or standard CBT, although CBT treatment designed specifically for hoarding has shown success in limited trials. Treatments are presented in Table 3.

Table 3
Summary of Treatments for Hoarding Disorder

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) for hoarding | A multi-component cognitive behavioral treatment designed specifically for hoarding has shown promising results in adults. |
| Not Adequately Tested | |
| SSRIs | Possibly efficacious because of their effectiveness with similar disorders. |

TRICHOTILLOMANIA AND EXCORIATION DISORDER

TRICHOTILLOMANIA (HAIR-PULLING DISORDER)

Trichotillomania involves hair pulling from some or many body parts, including the scalp. Some studies suggest that there are two subtypes of pulling: automatic pulling, which occurs largely outside of the individual's awareness, and focused pulling, which is a deliberate response to an urge, unpleasant emotion, or sensation. In addition to subtypes, hair pulling is often accompanied by ritual, such as choosing the right type of hair, pulling it with the root intact, or examining or manipulating the hair after pulling, including rolling it between fingers, biting, or swallowing it. Usually hair pulling only occurs when the individual is alone or around immediate family. Some individuals will pull hair from others in secret, or from rugs or dolls to satisfy their urges. Youth may report triggers such as tension, anxiety, or specific cognitions like the appearance of the hair, an itch, boredom, or specific settings. Trichotillomania onset typically begins during childhood or early adolescence.

Hair loss must occur to diagnose trichotillomania, but some youth will pull individual hairs throughout an area such that hair loss is less obvious. Additionally, individuals may wear hats or wigs to camouflage hair loss.

KEY POINTS

- Trichotillomania characterized by compulsive pulling and removing body hairs, which results in significant hair loss.
- Excoriation disorder characterized by compulsive picking of one's skin, leading to physical damage.
- No evidence-based treatments at this time, but habit reversal therapy and cognitive behavioral therapy seem to work.

EXCORIATION DISORDER (SKIN PICKING DISORDER)

Excoriation (skin-picking) disorder is characterized by picking at one's own skin, including healthy skin, calluses, and pimples. Individuals with excoriation disorder pick at actual and perceived skin defects, leading to physical damage. Most individuals use fingernails, but they may also use tweezers or pins, and they may also rub or squeeze the skin. The individual will frequently seek out a scab or other area to pick, and then examine, play with, or mouth the removed piece of skin or scab. Some picking is focused, with preceding anxiety or tension and subsequent relief, while in others picking is automatic without full awareness. Most individuals engage in both focused and automatic picking. For a diagnosis of excoriation, skin picking must lead to physical damage.

Skin picking may occur as a result of boredom or anxiety, and it may lead to a sense of gratification when successfully completed. At least some symptoms of skin picking can be common. Only when the symptoms reach the criteria for skin picking disorder (lesions, an attempt to stop, and accompanying distress) should the symptoms require intervention. Some research suggests that excoriation most frequently occurs in females from teens to late 30s.

TREATMENTS FOR TRICHOTILLOMANIA AND EXCORIATION DISORDER

Research exploring treatments for childhood trichotillomania and excoriation is promising, but the treatments have not been researched sufficiently enough to warrant the designation of evidence-based treatment. These and other treatments are summarized in Table 4.

CBT is emerging as a promising treatment for trichotillomania and excoriation disorder. CBT for these disorders involves many components common to habit reversal therapy (HRT) such as awareness training and developing a competing response. However, CBT treatments also incorporate several additional elements like psychoeducation and cognitive skills that are thought to provide additional benefits. Psychoeducation entails teaching youth and parents about the disorder and how to monitor behavior. Cognitive restructuring helps youth identify and change maladaptive beliefs associated with stressful situations and to distinguish between minor setbacks and full-blown relapses.

Components have also been added to HRT to target additional problems. In the treatment of trichotillomania or excoriation disorder, therapists may employ either emotion-regulation techniques (which help youth learn more adaptive ways of coping with emotion) or cognitive restructuring (which helps youth recognize and change the thoughts or emotions that occur before or after pulling or picking).

Table 4
Summary of Treatments for Trichotillomania and Excoriation

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Habit reversal therapy (HRT) | Treatment increases awareness to the feelings and context associated with the urges and implements a competing and inconspicuous habit in place of the hair pulling and skin picking. |
| Cognitive behavioral therapy (CBT) | Treatment involves exposing children to the stimuli associated with the urge, while challenging thoughts associated with high-risk situations. |
| Not Adequately Tested | |
| Selective serotonin reuptake inhibitors (SSRIs) N-acetylcysteine Naltrexone | Some demonstrated improvement on certain measures of picking behavior has been demonstrated in some pharmacological studies of adults. |

RESOURCES AND ORGANIZATIONS

Anxiety and Depression Association of America (ADAA)

<https://adaa.org>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

International OCD Foundation

<https://iocdf.org>

Mayo Clinic

Obsessive Compulsive Disorder

<https://www.mayoclinic.org/diseases-conditions/obsessive-compulsive-disorder/symptoms-causes/syc-20354432>

Mental Health America (MHA)

Obsessive-Compulsive Disorder

<http://www.mentalhealthamerica.net/conditions/ocd>

Trichotillomania

<http://www.mentalhealthamerica.net/conditions/trichotillomania-hair-pulling>

National Alliance on Mental Illness (NAMI)

<https://www.nami.org/>

National Anxiety Foundation

<http://www.nationalanxietyfoundation.org/ocd.html>

National Institute of Mental Health (NIMH)

Obsessive-Compulsive Disorder

<https://www.nimh.nih.gov/health/topics/obsessive-compulsive-disorder-ocd/index.shtml>

National Mental Health Information Center

<https://www.mentalhealth.gov/>

Obsessive-Compulsive Foundation

<https://iocdf.org/>

TLC Foundation for Body-Focused Repetitive Behaviors

<http://www.bfrb.org/index.php>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<http://www.samhsa.gov/>

VIRGINIA RESOURCES AND ORGANIZATIONS

National Alliance on Mental Health (NAMI) Virginia

<https://namivirginia.org/>

Virginia Commonwealth University (VCU) Medical Center

Virginia Treatment Center for Children

<https://www.chrichmond.org/Services/Mental-and-Behavioral-Health.htm?vtcc=true>

Virginia Department of Behavioral Health and Developmental Services (DBHDS)

<http://www.dbhds.virginia.gov/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>

University of Virginia Health System

Obsessive-Compulsive Disorder

<https://childrens.uvahealth.com/services/pediatric-psychiatry/obsessive-compulsive-disorder-ocd>



TRAUMA– AND STRESSOR–RELATED DISORDERS

Acute Stress Disorder • Post-Traumatic Stress Disorder
Adjustment Disorders • Attachment Disorders of Early Childhood

OVERVIEW

Trauma is a lasting adverse effect on an individual caused by an event that involves threat or danger. Events are not traumatic simply because they involve violence; instead, an individual's perception of threat or danger is what can cause trauma. Trauma can result when an individual directly experiences an adverse event, witnesses that event, or learns about it from others.

Exposure to trauma is very common. For instance, one study found that about 60 percent of children experience at least one trauma each year, with about 22 percent of these youth experiencing four or more different types of traumas.¹ Certain events can be more likely to trigger trauma- and stressor-related disorders, including being the victim of or witness to physical or sexual abuse, violence, accidents, and natural disasters, or being diagnosed with a life-threatening illness. However, the likelihood of an adverse outcome is determined by both the nature of the stressor(s) and the characteristics of the child, family, and post-stressor environment, as well as what interventions are offered after the traumatic event.

The primary trauma- and stressor-related disorders that affect children and adolescents are presented in Table 1. Because each category has different treatments, each will be discussed in its own section of this chapter.

Experiencing trauma can lead to a broad range of potential psychological outcomes, many of which are presented in Table 2. However, it is important to note that, while these factors may be consequences of trauma, they do not always occur following trauma.

Families should take care, as thoughts or attempts of suicide may occur with trauma- and stressor-related disorders. Information about suicide is provided in the “Youth Suicide” section of the *Collection*.

Trauma-Informed Care

A new form of care is emerging that takes into consideration trauma that individuals experienced in the past. Trauma-informed care programs are based on recognition that trauma survivors are vulnerable and potentially have triggers that may be aggravated by traditional service approaches. These programs seek to avoid those triggers and to prevent the trauma from reoccurring.

¹ Finkelhor, D., Turner, H., Ormrod, R., & Hamsby, S. (2009) Violence, abuse and crime exposure in a national sample of children and youth. *Pediatrics*, 1124, 1-13.

The treatments for trauma-informed care are similar to treatments for PTSD. Because such a large proportion of children have had an experience that can be classified as a traumatic experience, trauma-informed care is appropriate because it avoids situations wherein undue stress is placed upon a child by no fault of the clinician. These triggers are thought to have a negative effect on an affected youth's emotional health in the short term, as well as long-term effects on physical and cognitive health.

Table 1
Disorders Affecting Children and Adolescents Exposed to Trauma

| Disorder | | Description |
|---|--|---|
| Acute Stress Disorder (ASD) | | Dissociative, re-experiencing, avoidance, and hyper-arousal symptoms following a traumatic event that are diagnosed after lasting three days to four weeks after trauma. |
| Post-traumatic Stress Disorder (PTSD) | PTSD | Re-experiencing, avoidance, and hyper-arousal symptoms following a traumatic event that are diagnosed at least four weeks after trauma exposure. |
| | Preschool Subtype | Recreating trauma in play; ongoing dreams or nightmares related or unrelated to the traumatic event; avoiding activities or places that trigger memories of the trauma; and fear, guilt, and sadness, or withdrawing from friends and activities. Symptoms present for at least one month. |
| | Dissociative Subtype | Symptoms of PTSD combined with depersonalization, ongoing feeling of detachment from the body or mind, and derealization (regularly feeling that one's surroundings are unreal, dreamlike, or distorted). |
| Adjustment Disorders | | Emotional and behavioral symptoms in response to an identifiable stressor, such as termination of a relationship or a persistent painful illness (discussed in a separate chapter in the <i>Collection</i>). |
| Attachment Disorders of Early Childhood | Disinhibited Social Engagement Disorder (DSED) | This disorder is diagnosed only in children. Children with DSED exhibit overly familiar and comfortable behavior with relative strangers. |
| | Reactive Attachment Disorder (RAD) | This disorder is diagnosed only in children. RAD affects infants and very young children. A child with RAD has a pattern of showing disturbed and developmentally inappropriate attachment behaviors. The child rarely or minimally turns to an attachment figure for comfort, support, protection, and nurturance. |

Table 2
Symptoms and Consequences Related to Trauma in Children and Adolescents

| Domain | Potential Symptoms or Consequences |
|------------------------------|--|
| Physical/Physiological | <ul style="list-style-type: none"> • Hypersensitivity to physical contact • Numbness • Problems with coordination and balance • Unexplained physical pain (e.g., headaches, stomachaches) |
| Medical/Mental Health | <ul style="list-style-type: none"> • Asthma • Autoimmune disorders • Pseudoseizures • Sleep disturbances • Disordered eating • Dissociation (feeling that the self or world is not real) • Depression • Anxiety disorders • Substance abuse • Attention-deficit/hyperactivity disorder (ADHD) or ADHD-like symptoms • Suicide |
| Cognitive | <ul style="list-style-type: none"> • Poor attention • Problems with planning and goal-oriented behavior • Problems with learning • Lack of sustained curiosity • Problems processing new information. • Difficulties with language • Impairments in auditory, visual, or spatial perception and comprehension |
| Attachment/ Relationships | <ul style="list-style-type: none"> • Distrust of and/or uncertainty about those around them • Problems attaching to caregivers • Difficulties with boundaries • Interpersonal difficulties |
| Behavioral | <ul style="list-style-type: none"> • Poor impulse control • Self-destructive behavior • Aggression • Difficulty complying with rules • Oppositional behavior • Excessive compliance • Inappropriate sexual behaviors |
| Emotional | <ul style="list-style-type: none"> • Problems regulating emotions • Amnesia • Low self-esteem • Shame or guilt • Disturbances of body image |

ACUTE STRESS DISORDER (ASD)

ASD is diagnosed when problematic symptoms related to trauma last for at least three days after the trauma. Any symptoms manifesting immediately following the trauma that are resolved within three days do not meet the criteria for ASD. The manifestation of the disorder differs in every individual, but symptoms can mirror many of the symptoms of PTSD, which are discussed in the next section. Typically, symptoms consist of anxiety that includes some form of re-experiencing the trauma or reactivity related to the trauma.

KEY POINTS

- **Characterized by problematic symptoms of trauma that last more than three days but less than four weeks after the traumatic event.**
- **Half of youth with ASD later develop PTSD**
- **Treatment involves therapies that restore a sense of safety and assist youth with processing the event.**

If symptoms persist past four weeks, the youth may be then diagnosed with PTSD if the criteria are met. However, it is important to note that a youth may be diagnosed with PTSD without having been previously diagnosed with ASD. Approximately 50 percent of individuals with ASD may later develop PTSD. Recognizing acute stress symptoms in children and adolescents is a critical first step in the path towards preventing PTSD.

TREATMENT FOR ACUTE STRESS DISORDER

There are no standard treatments for acute stress disorder. The goal of intervention is to restore a sense of safety and assist in the processing of the traumatic event. In the days and weeks after a traumatic event, crisis intervention can involve elements of cognitive-behavioral therapy, supporting therapy, psychoeducational therapy, group and family therapy, and other age-appropriate therapies.

POSTTRAUMATIC STRESS DISORDER (PTSD)

PTSD is diagnosed when problematic symptoms related to trauma last longer than four weeks following a traumatic event. Children with PTSD show symptoms including, but not limited to, worrying about dying, insomnia, angry outbursts, and acting younger than their ages. The manifestation of PTSD can be different in every child or adolescent. Some youth experience PTSD through fear-based re-experiencing, while others have dysphoric mood states. PTSD can also manifest as arousal and reactive-externalizing symptoms.

KEY POINTS

- **Characterized by symptoms such as re-experiencing the event, hypervigilance, avoidance, and negative thoughts.**
- **Symptoms in young children can include recreating the trauma in play, reoccurring nightmares, and fear, guilt, or sadness.**
- **Trauma-focused cognitive behavioral therapy (TF-CBT) has the most support as an evidence-based treatment.**

Symptoms of PTSD have the following components:

1. Recurrent experiences of the event, as in memories, dreams, or flashbacks
2. Amplified arousal, including sleep disturbances and reckless behavior
3. Avoiding thoughts, places, and memories about the event
4. Negative thoughts, moods, or feelings

Families should look for the following symptoms:

- Recurring memories of the event, which elicit strong and traumatic feelings
- Bad dreams
- Reenacting trauma during play
- Fear of dying early
- Loss of interest in activities
- Physical symptoms like headaches and stomachaches
- Sudden and extreme emotional reactions
- Dissociation from emotions
- Problems sleeping, both in falling and staying asleep
- Irritability or angry outbursts
- Trouble concentrating
- Acting younger than their age, including thumb sucking, whining, and clinging to an adult
- Increased awareness or alertness to their surroundings
- Repeating behavior that reminds them of the trauma
- Avoiding situations or places that remind them of the trauma

PTSD Preschool Subtype

- Recreating trauma in play/recurrent dreams of the trauma;
- Ongoing nightmares with or without recognizable content about the traumatic event;
- Avoiding activities or places that remind the child of the trauma; and
- Exhibiting fear, guilt, and sadness, or withdrawing from friends and activities.

These symptoms cause major distress to the child; impair relationships with parents, family members, and/or friends; and affect the child's behavior in preschool or child care.

PTSD Dissociative Subtype

A child or adolescent with PTSD Dissociative Subtype also has symptoms of either depersonalization or derealization. Depersonalization is an ongoing feeling that the youth is detached from his or her body or mind. Derealization is the recurring experience that the youth's surroundings are unreal, dreamlike, or distorted. Some experts believe that dissociation may be a coping response, and it is sometimes seen after sexual abuse.

EVIDENCE-BASED TREATMENT FOR PTSD

Children suffering from PTSD symptoms following a trauma should be treated quickly. The earlier the intervention, the more effective are the treatments. The greatest emphasis should be placed on establishing an

environment in which the child feels safe. An evaluation by a qualified mental health professional should be sought for any child showing reoccurring problems handling a traumatic event. Treatments are presented in Table 3.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)

TF-CBT has been shown to be effective across a number of randomized controlled trials at improving PTSD, as well as symptoms of depression, shame, and behavioral problems. Parents who participated in treatment with their children have also been shown to have improved parenting skills in addition to decreased levels of trauma distress and depression.

TF-CBT treatment includes core elements that make up the acronym PRACTICE. Each PRACTICE component builds on skills gained in previous sessions:

Psychoeducation provided to children and parents about trauma and PTSD symptoms, while parents are provided with parenting skills to aid in the management of the child's symptoms.

Relaxation skills are provided.

Affective expression and modulation skills are treatment components.

Cognitive coping skills are provided.

Trauma narrative is developed and processed.

In-vivo mastery of trauma reminders is introduced to differentiate between reminders and dangerous cues in the environment.

Conjoint sessions, where the child and parent focus on having the child share his or her narrative and work on family communication, are also included.

Enhancing safety focuses on safety planning in the future.

These components typically take 12 to 16 sessions to complete. It is important to note that if it has been determined that the youth has complex trauma involving several traumatic incidences, treatment may take longer so that all trauma-related events can be addressed. Similar to other cognitive-behavioral treatments, parent involvement and knowledge of skills are considered to be important components of treatment so that parents or caregivers can help children with the skills outside of the therapy sessions.

TF-CBT is most effective with some degree of caregiver involvement; however, the treatment can still be effective with limited caregiver participation. TF-CBT may not be appropriate when the youth's predominant problems are disruptive behaviors such as defiance, disobedience, aggression, or rule breaking). Similarly, children who are severely depressed or suicidal, or who have active substance abuse, should first receive treatments specific to those conditions.

Table 3
Summary of Treatments for Youth with PTSD

| What Works | |
|--|---|
| Trauma-focused cognitive behavioral therapy (TF-CBT) | Treatment that involves reducing negative emotional and behavioral responses related to trauma by providing psychoeducation on trauma, addressing distorted beliefs and attributes related to trauma, introducing relaxation and stress management techniques, and developing a trauma narrative in a supportive environment. |
| What Seems to Work | |
| Family centered treatment (FCT) trauma treatment | FCT trauma treatment provides intensive in-home services and seeks to address the causes of trauma, including parental system breakdown, while integrating behavioral change. |
| School-based group cognitive behavioral therapy (CBT) | Similar components to TF-CBT, but in a group, school-based format. |
| Not Adequately Tested | |
| Child-centered play therapy | Therapy that utilizes child-centered play to encourage expression of feelings and healing. |
| Psychological debriefing | An approach in which youth talk about the facts of the trauma (and associated thoughts and feelings) and then are encouraged to re-enter into the present. |
| Medication | Includes treatment with selective serotonin reuptake inhibitors (SSRIs). |
| Resilient peer treatment | Classroom treatment that pairs withdrawn children with resilient peers with a parent present for assistance. |
| Eye movement desensitization and reprocessing therapy (EMDR) | Therapy that utilizes visual and physical memory imagery while the clinician creates visual or auditory stimulus to reduce negative memory and increase positive memory. |
| What Does Not Work | |
| Restrictive rebirthing or holding techniques | Restrictive rebirthing or holding techniques that may forcibly bind or restrict, coerce, or withhold food/water from children and have resulted, in some cases, in death; not recommended. |

ADJUSTMENT DISORDERS

For a full discussion of adjustment disorders, see the “Adjustment Disorders” section of the *Collection*.

Adjustment disorders are emotional and behavioral symptoms in response to an identifiable stressor. Examples of stressors include, but are not limited to, experiencing the end of a romantic relationship, experiencing persistent pain with increasing disability, living in a high-crime neighborhood, or experiencing a natural disaster. The diagnosis should be reevaluated if the symptoms persist for more than six months following the termination of the stressor. Adjustment disorders represent a simple response to some type of life stress, which may or may not be traumatic, and they are quite common in children and adolescents.

ATTACHMENT DISORDERS OF EARLY CHILDHOOD

In humans, healthy brain development depends upon forming strong attachments in infancy and early childhood to one or more caregivers. In rare cases, attachment is never established or is severely disrupted. When this happens, a child’s ability to form attachments can be severely compromised.

Disinhibited social engagement disorder (DSED) and reactive attachment disorder (RAD) are attachment disorders that manifest in early childhood in situations of profound neglect. These disorders are rare and are only diagnosed in young children.

RAD and DSED are sometimes seen in young children who have come into foster care after having been severely neglected, who have been hospitalized or institutionalized, or who experienced severe neglect in infancy or early childhood in an orphanage or other group care setting prior to adoption.

KEY POINTS

- **Rare disorders caused by a severe disruption to attachment to a primary caregiver in infancy or early childhood.**
- **Characterized by an inability to relate appropriately to caregivers and others (too familiar, too aloof, unable to accept comfort, etc.).**
- **Can indicate severe neglect or severe trauma in infancy or early childhood. Sometimes seen in children who have grown up in orphanages or war-torn areas.**
- **No standard treatments have been identified. Treatments should focus on establishing a strong bond with a caregiver.**

Disinhibited Social Engagement Disorder (DSED)

DSED is characterized by a pattern of behavior in which a child exhibits inappropriately familiar behavior with strangers. The disorder is characterized by:

- Violations of normal social boundaries
- Unusually familiar behavior (verbal or physical)
- Diminished checking with caregiver when venturing away in unfamiliar settings
- A lack of fear in approaching and interacting with unfamiliar adults
- A willingness to go off with unfamiliar adults

DSED stems from extremely insufficient care of the child. DSED is rare, even in children who have been severely neglected.

Onset for DSED is typically before age five, and it may continue for life unless the child is treated and able to form new attachments. In high-risk populations, including severely neglected children placed in foster care or institutions, approximately 20 percent exhibit signs of DSED.

Reactive Attachment Disorder (RAD)

RAD is characterized by a consistent pattern of emotionally withdrawn behavior by the child towards his or her caregiver. A child with RAD rarely seeks comfort when distressed and rarely responds to comfort if given. Children with RAD exhibit limited emotional responses, are often bewildered or confused, and have unexplained episodes of sadness and irritability. They may also be unhygienic and have underdeveloped motor coordination.

Symptoms typically occur around age five, but may occur in infants and continue as the child ages. Caregivers usually notice some or all of the following symptoms:

- Severe colic or difficulties feeding
- Failure to gain weight appropriately
- Difficulty accepting comfort or being calmed or soothed by caregiver
- A preoccupied or defiant attitude
- Being inhibited or hesitant in social interactions
- Being disinhibited or inappropriately familiar with strangers

Frequently, these symptoms occur in children who have been physically or emotionally abused and neglected. Often, RAD occurs in children raised in hospitals or institutional settings, those who have experienced traumatic loss, or those whose primary caregiver changes frequently. In high-risk populations, including severely neglected children placed in foster care or institutions, almost 10 percent exhibit signs of RAD.

RAD symptoms are very similar to those exhibited by children with Autism Spectrum Disorder, and children exhibiting these symptoms should be evaluated for both disorders.

TREATMENTS FOR ATTACHMENT DISORDERS OF EARLY CHILDHOOD

There are no standard treatments for attachment disorders that manifest in early childhood. Treatments have been shown to be beneficial when they emphasize the following in the child/caregiver relationship: psychological safety, stability in the time spent with the child, empathy when listening, permanence of an attachment figure, and emotional availability or attentiveness to the child's needs. Treatment can also include individual and family therapy, education, and parenting skills classes. A child with RAD or DSED may take a year or longer to trust a caregiver again.

RESOURCES AND ORGANIZATIONS

Anxiety Disorders Association of America (ADAA)
<https://adaa.org/>

Association for Behavior and Cognitive Therapies
<http://www.abct.org/Home/>

Child Welfare League of America (CWLA)
<http://www.cwla.org>

Georgetown University Center for Child and Human Development
Trauma Informed Care
<http://gucchdtacenter.georgetown.edu/TraumaInformedCare.html>

International Society for Traumatic Stress Studies
<http://www.istss.org/>

Medical University of South Carolina (MUSC)
Trauma Focused-Cognitive Behavioral Therapy
<http://tfcbt.musc.edu>

National Anxiety Foundation
<http://www.nationalanxietyfoundation.org/>

National Child Traumatic Stress Network
<https://www.samhsa.gov/child-trauma>

Prevent Child Abuse America
800-CHILDREN (244-5373) or 312-663-3520
<http://preventchildabuse.org/>

Society of Clinical Child and Adolescent Psychology
<https://sccap53.org/>

VIRGINIA RESOURCES AND ORGANIZATIONS

Ainsworth Attachment Clinic & Circle of Security
(434) 984-2722
<http://theattachmentclinic.org>

Child Savers Guidance Clinic & Trauma Response
804-644-9590
<https://childsavers.org/>

Families Forward
<https://www.familiesforwardva.org/>

University of Virginia Health System
<https://childrens.uvahealth.com/>

Virginia Child & Family Attachment Center
(434) 242-2960
<https://attachmentclinic.org>

Virginia Commonwealth University (VCU)
Center for Psychological Services and Development
<https://cpsd.vcu.edu/>

VCU Medical Center
Virginia Treatment Center for Children
<https://www.chrichmond.org/Services/Mental-and-Behavioral-Health.htm?vtcc=true>

Virginia Department of Behavioral Health and Developmental Services
<http://www.dbhds.virginia.gov/>

Virginia Tech
Child Study Center
<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center
<https://www.psyc.vt.edu/outreach/psc>



ADJUSTMENT DISORDER

OVERVIEW

Adjustment disorders occur when a youth finds it difficult to cope with a stressful event or situation. Mental and physical symptoms of adjustment disorders include:

- Feeling sad or hopeless; crying or withdrawing from others
- Defiant or impulsive behavior, including vandalism and ignoring school work
- Nervous or tense demeanor
- Arrhythmia (skipped heartbeats), twitching, trembling, or other physical symptoms

KEY POINTS

- Characterized by difficulty coping with a stressful event or situation.
- Symptoms of depression, defiant or impulsive behavior, or nervous demeanor are more severe than expected.
- Associated with an increased risk of suicide.
- No evidence-based treatments have been identified. A variety of psychotherapeutic treatments seem to work.

This list is not exhaustive, but it may help determine whether a physical or emotional symptom is in reaction to a stressor. The symptoms must appear soon after a stressor, be more severe than expected, not be part of another disorder, and not have any other reasonable explanation.

Families should take care, as thoughts or attempts of suicide may occur with adjustment disorders. Information about suicide is provided in the “Youth Suicide” section of the *Collection*.

In order to be diagnosed as an adjustment disorder, the child’s reaction must occur within three months of the identified event. Typically, the symptoms do not last more than six months, and the majority of children quickly return to normal functioning. Adjustment disorders differ from post-traumatic stress disorder (PTSD) in that PTSD usually occurs in reaction to a life-threatening event and may last longer. Adjustment disorders may be difficult to distinguish from major depressive disorder.

Adjustment disorders can occur with many different mental disorders and any medical disorders. As many as 70 percent of all individuals diagnosed with an adjustment disorder are also diagnosed with a co-occurring disorder or illness. In children, adjustment disorders are also most likely to occur with conduct or behavioral problems. Patients with adjustment disorders may engage in deliberate self-harm.

CAUSES AND RISK FACTORS

There is no evidence to indicate that biological factors influence the cause of adjustment disorders; the most widely accepted thought is that stress itself is the precipitating factor. Because children possess varying dispositions, as well as different vulnerabilities and coping skills, it is impossible to attribute a single explanation as to why some stressors trigger adjustment disorders in some children and others do not. However, experts have found that the developmental stage of the child and the strength of the child's support system influence their reaction to the stressor. One common trigger for adjustment disorder includes grief and bereavement, especially following the death of a family member or sibling.

Stressors that may cause adjustment disorders can include the following:

- Death of a loved one
- Illness in the youth or a family member
- Moving to a different home or a different environment
- Unexpected catastrophes, including natural disasters
- Family problems
- School problems
- Sexuality issues

Not every individual will develop an adjustment disorder after one or several of these life events. Better social skills and coping techniques may help prevent adjustment disorders. The *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5) notes that individuals in "disadvantaged life circumstances" experience a high stressor rate and, as a result, may be at greater risk for developing adjustment disorders.

TREATMENT

Currently, there are no evidence-based treatments identified for adjustment disorders. Children and adolescents can work with clinicians to overcome the symptoms of adjustment disorders. Often, the treatment will include talk therapy to help identify and even change the stressors in the child's life. One type of therapy is cognitive behavioral therapy (CBT) wherein the therapist will help the youth identify negative feelings and thoughts and then show the youth how to change those thoughts into healthy, positive thoughts and actions.

Families can also utilize the following techniques to help reduce stress:

- Allow your child to talk about the stress in a supportive environment
- Eat a healthy diet
- Have a regular sleep routine
- Get regular physical activity
- Engage in a hobby, either alone or with family
- Offer support and understanding
- Reassure your child that his or her reactions are common
- Work with teachers to track progress at school
- Let your child make simple decisions, including dinner and movie choices

Because an adjustment disorder is a psychological reaction to a stressor, the most widely accepted treatment process involves identifying the stressor and having a child communicate that stressor effectively. If the stressor is eliminated, reduced, or accommodated, the child's maladaptive response can also be reduced or eliminated. Accordingly, treatment of adjustment disorder usually involves psychotherapy that seeks to reduce or remove the stressor or improve coping ability.

Treatments for adjustment disorders must be tailored to the needs of the child, based on the child's age, health, and medical history. There is no consensus on a clear treatment plan at this time. Treatment selection is a clinical decision to be made with the treating clinician and the patient. However, because of the brevity of adjustment disorders, short-term psychotherapy is generally preferred to long-term. Treatments are outlined in Table 1.

Table 1
Summary of Treatments for Adjustment Disorder

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Interpersonal psychotherapy (IPT) | IPT helps children and adolescents address problems to relieve depressive symptoms. |
| Cognitive behavioral therapy (CBT) | CBT is used to improve age-appropriate problem-solving skills, communication skills, and stress management skills. It also helps the child's emotional state and support systems to enhance adaptation and coping. |
| Stress management | Stress management is particularly beneficial in cases of high stress and helps the youth learn how to manage stress in a healthy way. |
| Group therapy | Group therapy among of like-minded/afflicted individuals can help group members cope with various features of adjustment disorders. |
| Family therapy | Family therapy is helpful for identifying needed changes within the family system. These changes may include improving communication skills and family interactions and increasing support among family members. |
| What Does Not Work | |
| Medication alone | Medication is seldom used as a singular treatment because it does not provide assistance to the child in learning how to cope with the stressor. Targeted symptomatic treatment of the anxiety, depression, and insomnia may effectively augment therapy. |

Psychotherapy

Psychotherapy is the treatment of choice for adjustment disorders because the symptoms are a direct reaction to a specific stressor. However, the type of therapy depends on the needs of the child, with the focus being on addressing the stressors and working to resolve the problem. Interpersonal psychotherapy (IPT) has the most support for treating children with adjustment disorders. For depressed adolescents, IPT is a well-established treatment. IPT helps children and adolescents address problems in their relationships with family members and friends. Typically, the clinician works one-on-one with the child and his or her family.

Within preliminary clinical trials, brief treatment using cognitive-behavioral strategies also shows promise. Cognitive-behavioral approaches are used to improve age-appropriate problem solving skills, communication skills, impulse control, anger management skills, and stress management skills. Additionally, therapy assists with shaping an emotional state and support systems to enhance adaptation and coping.

There are specific goals that should be met during psychotherapy in order for it to be successful for the patient. During psychotherapy the following should occur:

- Analyze stressors affecting patient;
- Clarify and interpret the meaning of the stressor;
- Attempt to reframe stressor;
- Illuminate concerns of the patient;
- Configure a plan to reduce stressor; and
- Increase coping skills of patient

Stress management and group therapy are particularly beneficial in cases of work-related and/or family stress. Family therapy is frequently utilized, with the focus on making needed changes within the family system. These changes may include improving communication skills and family interactions and increasing support among family members.

Preventive measures to reduce the incidence of adjustment disorders in children are not known at this time. However, early detection and intervention can reduce the severity of symptoms, enhance the child's normal growth and development, and improve quality of life.

Pharmacological Treatment

Medication is seldom used as a single treatment for adjustment disorders because the child requires assistance in coping with the stressor, as well as his or her reaction to it. However, targeted symptomatic treatment of the anxiety, depression, and insomnia that can occur with adjustment disorders may effectively augment therapy, but is not recommended as the primary treatment for adjustment disorders.

RESOURCES AND ORGANIZATIONS

American Academy of Child Adolescent Psychiatry (AACAP)

<http://www.aacap.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Child Welfare Information Gateway

<https://www.childwelfare.gov/>

Internet Mental Health

<http://www.mentalhealth.com/home/>

Mental Health Matters

<https://mental-health-matters.com/>

New York University School of Medicine

Child Study Center

<https://med.nyu.edu/child-adolescent-psychiatry/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

U.S. Department of Health and Human Services

<https://www.hhs.gov/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>



FEEDING AND EATING DISORDERS

Anorexia Nervosa • Bulimia Nervosa • Binge Eating Disorder

OVERVIEW

The three main categories of feeding and eating disorders are anorexia nervosa, bulimia nervosa, and binge eating disorder (see Table 1). Because each category has different treatments, each will be discussed in its own section of this chapter.

Table 1
Feeding Disorders Affecting Children & Adolescents

| Disorder | Description |
|-----------------------------|--|
| Anorexia nervosa (AN) | Distorted body image and pathological fear of becoming fat that leads to excessive dieting and extreme weight loss. Can include purging or excessive exercise. |
| Bulimia nervosa (BN) | Frequent episodes of binge eating followed by purging behaviors such as vomiting or laxative use to avoid weight gain. Weight unduly influences self-concept. |
| Binge eating disorder (BED) | Excessive, out-of-control eating without purging that causes marked distress. Weight does not need to unduly influence self-concept. |

Eating disorders are a significant problem in the United States among children and adolescents of all ethnic groups. The American Psychiatric Association (APA) has reported that eating disorders are now the third most common form of chronic illness in the adolescent female population, with prevalence rates as high as ten percent. Males also struggle with eating disorders, as they account for approximately 10 percent of the bulimia nervosa population and 35 percent of the anorexia nervosa population.

While feeding and eating disorders are considered to be psychiatric in nature, accompanying nutrition and medical problems may make them life-threatening.

Psychological disorders often co-occur with AN, BN, or BED. For instance, as many as 50 percent of individuals with a feeding and eating disorder also have depression. These disorders can precede or accompany the onset of feeding or eating disorder, and they sometimes remit after treatment. Co-occurring disorders include:

- Depressive disorders
- Anxiety disorders
- Bipolar disorder
- Substance abuse disorders
- Obsessive-compulsive disorder

The risk of suicide in individuals diagnosed with an eating disorder is substantial. Individuals with BN report a greater number of suicidal attempts (25 to 35 percent), compared to those with AN (10 to 20 percent). Researchers speculate that the link between purging and suicidal attempts may point to a general lack of impulse control, whereas the higher prevalence of suicidal thoughts among individuals with AN suggests chronic self-harming behavior. For more information, see the “Youth Suicide” section of the *Collection*.

CAUSES AND RISK FACTORS

Attempts to identify a single cause of eating disorders have been abandoned and replaced by a more multifaceted etiological theory. Studies suggest disordered eating typically develops from a complex interaction of psychological risk factors, sociocultural influences, and biological or genetic predispositions. Common risk factors are provided in Table 2.

Table 2
Risk Factors for Feeding and Eating Disorders

| Category | Common Risk Factors |
|---|--|
| Psychological factors and personality traits | <ul style="list-style-type: none"> Negative affect or outlook Low self-esteem Intense dissatisfaction with appearance Perfectionism Impulsivity Rigid cognitive styles and/or need for control Obsessive-compulsiveness Avoidance traits Lack of self-direction |
| Dysfunctional families and relationships | <ul style="list-style-type: none"> Conflict avoidance Significant parental enmeshment Rigid/overprotective parenting |
| History of abuse or trauma | <ul style="list-style-type: none"> Physical abuse Sexual abuse Traumatic events |
| Involved in activity that has an emphasis on body shape or weight | <ul style="list-style-type: none"> Sports that emphasize aesthetics or thinness (e.g., gymnastics, running) Sports that include weight classes (e.g., wrestling) Dance or other performance arts Appearance-centric activities (e.g., modelling, beauty pageants) |
| Genetic factors | Unclear; however first-degree female relatives and identical twin siblings have higher rates of eating disorder diagnoses |

TREATMENT CONSIDERATIONS

The earlier an eating disorder is identified and treated, the better the chances for recovery. However, families should be aware that it might take as long as 10 years from the commencement of treatment to behavioral cure, including normal eating and normal weight. A comprehensive treatment plan should include medical care and monitoring, psychosocial interventions, nutritional counseling and, when appropriate, medication management.

Treatment locations range from intensive patient settings, in which general medical consultation is readily available, to partial hospital and residential programs with varying levels of outpatient care. The individual's weight, cardiac, and metabolic status are the most important physical parameters for determining treatment setting. Individuals who weigh under 85 percent of their estimated healthy weights are likely to require a highly structured program and possibly 24-hour hospitalization. Hospitalization should occur before the onset of medical instability, as manifested by severely abnormal vital signs.

ANOREXIA NERVOSA (AN)

The primary characteristic/criterion of AN is intense fear of gaining weight or becoming fat, even when the individual is underweight. Individuals with AN resist maintaining their body weight at or above a minimally normal weight for their age and height. Youth with AN will often exhibit significantly low weight. Some may also exhibit purging or binge/purging behaviors.

Individuals with AN sometimes have specific personality traits, including perfectionist traits and low self-esteem (see Table 2), and they can be high achievers. Many have an intense need for a feeling of mastery over their lives. Primary features and signs and symptoms of AN appear in Table 3.

KEY POINTS

- **Characterized by distorted body image, fear of becoming fat, and excessive dieting. Can include purging.**
- **If untreated, can cause extremely low body weight, malnutrition, dehydration, and death.**
- **Associated with an increased risk of suicide.**
- **Family-based psychotherapy is the gold standard of treatment.**

TREATMENTS FOR ANOREXIA NERVOSA

A summary of treatments for AN is presented in Table 4. The treatment of AN generally occurs in three phases:

1. Restoring the weight lost by severe dieting and purging
2. Treating psychological disturbances, such as distorted self-perception, low self-esteem, and interpersonal issues
3. Achieving long-term, full recovery

Table 3
Primary Features and Common Signs and Symptoms of Anorexia Nervosa

| Primary Features | Common Signs and Symptoms |
|--|--|
| <ul style="list-style-type: none"> Excessive food restriction Distorted body image Undue influence of body weight and shape in self-evaluation/fear of gaining weight Denial of the seriousness of the current low body weight <p>May lead to:</p> <ul style="list-style-type: none"> Significant weight loss Dangerous side-effects including malnutrition and dehydration, which can lead to death | <ul style="list-style-type: none"> Starving oneself by fasting or calorie restriction Purging or binge/purge behaviors Excessive exercise Changes in the mouth, including enlarged salivary glands, changed tooth color, tissue loss or lesions, heightened sensitivity to temperature, and tooth decay Dry and/or yellowing skin Dehydration Abdominal pain and/or constipation Lethargy, dizziness, and/or fatigue Development of fine, downy body hair Infrequent or absent menstrual periods Intolerance to cold Wearing clothing that hides weight loss Emaciation |

Family-Based Psychotherapy

Family-based psychotherapy is considered the gold standard of treatment for AN in adolescents. The goal of family therapy is to involve family members in symptom reduction and to deal with family relational problems that may contribute to AN. Family-based therapy occurs over the following three stages:

1. Parents, along with the therapist, take responsibility to ensure the adolescent is eating sufficiently and controlling other pathologic weight control methods. Substantial weight recovery occurs before moving to the second phase.
2. Parents and the therapist help the adolescent gradually take over responsibility for his or her eating. Weight is restored in the second phase, and then the family moves onto the third phase.
3. The family addresses more general issues of the adolescent's development and how they were disrupted by the eating disorder.

Family psychotherapy may not be appropriate for families in which one or both parents exhibit psychopathy or hostility to the affected child, and it may not be appropriate for the most medically compromised adolescents.

In-Patient Behavioral Programs

These programs commonly provide a combination of nonpunitive reinforcers, such as privileges linked to weight goals and desired behaviors. They have been shown to produce good short-term therapeutic effects. Adolescents with AN may have the best outcomes after structured in-patient or partial hospitalization treatment.

Nutritional Rehabilitation

Evidence suggests that nutritional monitoring is effective in helping individuals return to a healthy weight, so long as it is conducted in a setting that meets the individual's needs. Increasing calories consumed may be difficult, but smaller, frequent meals, calorie dense foods, and substituting fruit juice for water may help negate psychological barriers, such as aversion to a feeling of fullness. For severely underweight individuals, individual treatment has been found to be most effective. Clinicians have reported that, as weight is restored, other eating disorder and psychiatric comorbid symptoms diminish; however, they often do not disappear completely. Psychoeducational nutrition groups have also been associated with positive outcomes. Although helpful, it is important that nutrition counseling serve as only one component of a multidisciplinary treatment approach.

Table 4
Summary of Treatments for Anorexia Nervosa

| What Works | |
|------------------------------------|--|
| Family psychotherapy | Family members are included in the process to assist in reduction of symptoms and modify maladaptive interpersonal patterns. |
| In-patient behavioral programs | Individuals are rewarded for engaging in healthy eating and weight-related behaviors. |
| Nutritional rehabilitation | Entails developing meal plans and monitoring intake of adequate nutrition to promote healthy weight gain. |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | Needs further study to be well established; it is used to change underlying eating disorder cognitions and behaviors. |
| Medication | Used primarily after weight restoration to minimize symptoms associated with psychiatric comorbidities. |
| Not Adequately Tested | |
| Individual psychotherapy | Controlled trials have not supported this treatment; however, it may be beneficial during the refeeding process and to minimize comorbid symptoms. |
| What Does Not Work | |
| Group psychotherapy | May stimulate the transmission of unhealthy techniques among group members, particularly during acute phase of disorder. |
| 12-step programs | Not yet tested for their efficacy; discouraged as a sole treatment. |
| Tricyclic antidepressants | Tricyclic antidepressants are contraindicated and should be avoided in underweight individuals and in individuals who are at risk for suicide. |
| Somatic treatments | To date, treatments such as vitamin and hormone treatments and electroconvulsive therapy show no therapeutic value. |

BULIMIA NERVOSA (BN)

BN consists of recurrent episodes of binge eating, characterized by consumption of excessive amounts of food within a discrete period of time, and lack of control in overeating during the episode. In order to prevent weight gain, the binges are followed by recurrent inappropriate responses, such as self-induced vomiting or misuse of laxatives and other medications (often referred to as purging), fasting, or excessive exercise. Purging is dangerous behavior and may seriously damage health, causing dehydration and hormonal imbalance, depleting minerals, and damaging organs.

Binge eating and compensatory behaviors both occur, on average, at least once a week for three months or more. Finally, like other eating disorders, the individual's self-evaluation is unduly influenced by body shape and weight. Recognizing BN can be challenging because many individuals with BN are within normal weight range.

Youth affected with BN are often embarrassed by their compulsion to eat and may also attempt to hide their symptoms. Primary features and signs and symptoms of BN appear in Table 5.

KEY POINTS

- **Characterized by out-of-control binge eating followed by purging techniques such as vomiting or using laxatives.**
- **Can be hard to spot; many people with BN are within normal weight ranges.**
- **Excessive purging can seriously damage health.**
- **Dentists often notice signs first because excessive vomiting can cause changes in the mouth.**
- **Associated with an increased risk of suicide.**
- **Cognitive behavioral therapy is considered the gold standard of treatment.**

TREATMENTS FOR BULIMIA NERVOSA

The primary goal of treatment with individuals with BN is to reduce or eliminate binge eating and purging behavior. Nutritional rehabilitation, psychosocial intervention, and medication management strategies are therefore often used. Specifically, treatment includes establishing regular, non-binge meals, improving attitudes related to the disorder, encouraging healthy but not excessive exercise, and resolving any co-occurring mental health disorders such as anxiety or mood disorders. A summary of treatments for BN is presented in Table 6.

Cognitive Behavioral Therapy (CBT)

This form of psychotherapy, when specifically directed at BN symptoms and underlying conditions, is the intervention for which there is the most evidence of efficacy. It has been found to lead to significant reductions in binge eating, vomiting, and laxative abuse. Some consider CBT the “gold standard” of therapy. It involves a combination of psychoeducation, self-monitoring, adjusting reactions to cues, confronting and restructuring automatic thoughts, problem solving, exposure while preventing response, and preventing relapse.

Table 5
Primary Features and Common Signs and Symptoms of Bulimia Nervosa

| Primary Features | Common Signs and Symptoms |
|---|---|
| <ul style="list-style-type: none"> • Undue influence of body weight and shape in self-evaluation/fear of gaining weight • Excessive and uncontrolled eating followed by purging methods such as vomiting, laxatives, enemas, diuretics, exercising <p>May lead to:</p> <ul style="list-style-type: none"> • Dehydration • Hormonal imbalance • Depleting important minerals • Damaging vital organs | <ul style="list-style-type: none"> • Alternating binges and severe diets • Severe weight fluctuations • Purging calories by self-induced vomiting and/or using laxatives • May run water to hide vomiting • Scars on the back of the hand caused by induced vomiting • Changes in the mouth, including enlarged salivary glands, changed tooth color, tissue loss or lesions, heightened sensitivity to temperature, and tooth decay • Excessive exercise • Dry hair and skin; hair loss; skin pigmentation changes |

Table 6
Summary of Treatments for Bulimia Nervosa

| What Works | |
|--------------------------------------|--|
| Cognitive behavioral therapy (CBT) | The most effective independent treatment option; it is used to change underlying eating disorder cognitions and behaviors. |
| Combined treatments | A combination of CBT and medication seems to maximize outcomes. |
| What Seems to Work | |
| Medication | Antidepressants, namely SSRIs, have effectively reduced binge/purging behaviors, as well as comorbid psychiatric symptoms. |
| Not Adequately Tested | |
| Individual psychotherapy | Compared to CBT, few individual therapeutic approaches have been effective in reducing symptoms. |
| Family therapy | May be more beneficial than individual psychotherapy, but outcomes should be considered preliminary at this time. |
| What Does Not Work | |
| Bupropion | Bupropion has been associated with seizures in purging individuals with BN and is contraindicated. |
| Monoamine oxidase inhibitors (MAOIs) | MAOIs are potentially dangerous in individuals with chaotic bingeing and purging and their use is contraindicated. |
| 12-step programs | Discouraged as a sole treatment because they do not address nutritional or behavioral concerns. |

Combined Treatments

There is generally a better response to CBT than pharmacotherapy; however, the combination of these two methods has been found to be superior to either treatment independently.

BINGE-EATING DISORDER (BED)

In 2013, the *Diagnostic and Statistical Manual for Mental Health Disorders* (DSM-5) included the diagnosis of BED as an official disorder. This addition is highly significant because BED is likely to be the most prevalent eating disorder. BED shares the binge-eating criterion of bulimia nervosa (BN) of consuming an objectively large quantity of food in a relatively short time while experiencing a loss of control. The disorder differs from BN, however, in that individuals with BED do not engage in compensatory behaviors, such as vomiting or laxative use, after binge eating. In addition, for an individual to be diagnosed with BN, body weight and shape must unduly influence his or her self-concept. This is not necessary for a diagnosis of BED.

KEY POINTS

- **Characterized by out-of-control binge eating with marked distress, but without purging.**
- **Can cause weight gain and obesity-related health risks.**
- **Body weight and shape do NOT need to unduly influence self-concept.**
- **Newly-recognized disorder; no evidence-based treatments for youth yet established.**

The second criterion for BED describes behaviors, emotions, and thoughts associated with binge eating. BED includes recurrent episodes of binge eating followed by marked distress. Binge eating is accompanied by an uncontrollable feeling that one cannot stop eating.

Primary features and signs and symptoms of BED appear in Table 7.

TREATMENTS FOR BINGE EATING DISORDER

The treatment goals and strategies for BED are similar to those for BN. The primary difference in the two disorders is that individuals with BED may present with difficulties associated with being overweight rather than being malnourished. Consequently, the treatment strategies tend to diverge only in the nature of medical interventions. However, BED has been relatively unexamined in younger patients and no treatments yet meet evidence-based criteria.

A summary of treatments for BED is presented in Table 8.

Table 7
Primary Features and Common Signs and Symptoms of Binge Eating Disorder

| Primary Features | Common Signs and Symptoms |
|--|--|
| <ul style="list-style-type: none"> Frequent episodes of excessive and uncontrolled eating that cause marked distress Feeling that one cannot control or stop a binge No purging like in bulimia nervosa Self-concept need NOT be unduly influenced by body weight and shape May lead to weight gain, health issues associated with obesity, and/or future purging behaviors | <ul style="list-style-type: none"> Eating more rapidly than normal Eating until uncomfortably full Eating large amounts of food when not hungry Eating alone because of embarrassment from the amount of food being consumed Feeling disgusted with oneself, depressed, or very guilty after a binge Weight gain |

Table 8
Summary of Treatments for Binge Eating Disorder

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | The most effective independent treatment option; it is used to change underlying eating disorder cognitions and behaviors. |
| Interpersonal psychotherapy (IPT) | Attempts to reduce the use of binge eating as a coping mechanism by supporting the development of healthy interpersonal skills. |
| Medication | Antidepressants, namely SSRIs, have effectively reduced binge/purging behaviors, as well as comorbid psychiatric symptoms. |
| Not Adequately Tested | |
| Dialectical behavior therapy (DBT) | These treatments are suggested as future areas of research. |
| Mindfulness and yoga-based interventions | |
| What Does Not Work | |
| Nutritional rehabilitation and counseling | Although initial weight loss is associated with these treatments, weight is commonly regained. |
| 12-step programs | Discouraged as a sole treatment because they do not address nutritional or behavioral concerns. |

RESOURCES AND ORGANIZATIONS

Academy for Eating Disorders (AED)

<https://www.aedweb.org/home>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Eating Disorders Coalition for Research, Policy & Action (EDC)

<http://www.eatingdisorderscoalition.org/>

Eating Disorders Treatment

<http://www.eating-disorder.com/>

EDReferral.com (Eating Disorder Referral and Information Center)

<https://www.edreferral.com/>

Johns Hopkins Eating and Weight Disorders Program

https://www.hopkinsmedicine.org/psychiatry/specialty_areas/eating_disorders/index.html

Maudsley Parents

<http://www.maudsleyparents.org/>

National Association of Anorexia Nervosa and Associated Eating Disorders

<http://www.anad.org/>

National Eating Disorders Association (NEDA)

Information & Referral Helpline: 800-931-2237

<https://www.nationaleatingdisorders.org/>

National Institute of Mental Health (NIMH)

<https://www.nimh.nih.gov>

Society for Adolescent Health and Medicine (SAHM)

<https://www.adolescenthealth.org/Home.aspx>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov/>

VIRGINIA RESOURCES AND ORGANIZATIONS

James Madison University

Help Overcome Problems with Eating and Exercise (HOPE)

<https://www.jmu.edu/healthcenter/PreventionandEducation/hope-multiregion.shtml>

Virginia Commonwealth University Health System

Department of Psychiatry

<https://psych.vcu.edu/>

Virginia Treatment Center for Children (VTCC)

<https://www.chrichmond.org/services/virginia-treatment-center-for-children.htm>

Virginia Tech

Cook Counseling Center

http://ucc.vt.edu/self_help_support_strategies/help_eating_disorders.html



DISRUPTIVE, IMPULSE-CONTROL, AND CONDUCT DISORDERS

OVERVIEW

A child being disagreeable is normal. Oppositional behavior is a serious concern only if it is extreme when compared with children of similar age and developmental level, and if it affects the child's social, family, and academic life. Defiant and oppositional behavior can manifest itself as oppositional defiant disorder (ODD), the more severe conduct disorder (CD), or intermittent explosive disorder (IED). Other disorders included in this category are pyromania and kleptomania.

While some characteristics of ODD and CD overlap, there are important distinctions. Youth with ODD may not display significant physical aggression and may be less likely to have problems with the law. Moreover, because ODD is seen as a disorder of noncompliance and CD involves the violation of another's rights, it is helpful to view these mental health disorders as two points on a continuum, rather than as two separate mental health disorders.

Increases in oppositional and antagonistic behaviors are somewhat typical at the onset of adolescence. Youth with autism spectrum disorder, anxiety, or depression may also be more likely to exhibit these symptoms. Clinicians, therefore, should give careful consideration to determining whether oppositional behaviors are manifestations of typical development or of a primary mental health disorder.

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) criteria for disruptive, impulse-control and conduct disorders are outlined in the paragraphs that follow.

Oppositional Defiant Disorder (ODD)

ODD manifests as a pattern of hostile and oppositional behavior, including but not limited to:

- Frequent temper tantrums
- Excessive arguing with adults
- Active defiance and refusal to comply with adult requests and rules
- Deliberate attempts to annoy or upset people

KEY POINTS

- Characterized by extreme oppositional behavior that affects a child's social, family, and academic life.
- Risk factors include living in dysfunctional or violent environments, child abuse and neglect, deviant peer associations, and genetic influences.
- Parent behavior management training is the primary intervention.
- Multisystemic therapy and cognitive behavioral therapy are also evidence-based treatments.

- Blaming others for his or her mistakes or misbehavior
- Often being touchy or easily annoyed by others
- Frequent anger and resentment
- Aggressive behavior
- Mean and hateful talking when upset
- Spiteful attitude and revenge seeking

Oppositional behaviors often manifest in the home setting and with adults the youth knows well. Behaviors may or may not be present in the school and/or community settings, and thus may not be present in the mental health professional's office. The severity of the disorder is indicated by the number of settings in which the symptoms are present. Significant distress or impairment in functioning must also be present in order to make a diagnosis of ODD.

Conduct Disorder (CD)

Children and adolescents with CD exhibit persistent and critical patterns of misbehavior. Like children with ODD, youth with CD may have an issue with controlling their tempers; however, these youth also violate the rights of others.

The symptoms of CD include, but are not limited to, the following:

- Bullies, threatens, or intimidates others
- Deceitfulness and lying to obtain goods or favors or to avoid obligations
- Stealing from others, sometimes while confronting the victim
- Serious violations of rules (truant, runs away, etc.)
- Often initiates physical fights
- Deliberate destruction of property
- Aggression and/or physical cruelty to people and animals
- Use of a dangerous weapon on others with the intent to harm
- Forces someone into sexual activity

These disturbances must cause clinically significant impairment in social, academic, or occupational functioning. Children and adolescents diagnosed with CD have more difficulty in areas of academic achievement, interpersonal relationships, drugs, and alcohol use. They also are often exposed to the juvenile justice system because of their delinquent or disorderly behaviors. Some will develop adult antisocial personality disorder later in life.

Intermittent Explosive Disorder (IED)

IED involves impulsive or anger-based aggressive outbursts that begin rapidly. The outbursts often last fewer than 30 minutes and are provoked by minor actions of someone close, often a family member or friend. The aggressive episodes are generally impulsive and/or based in anger rather than premeditated.

Aggressiveness must be “grossly out of proportion” to the provocation and accompanying psychosocial stressors. The recurrent outbursts are neither premeditated, nor are they to achieve an outcome. Thus,

outbursts are impulsive or based in anger, and are not meant to intimidate or to seek money or power. Finally, the outbursts must cause the individual considerable distress, impair his or her occupational or interpersonal functioning, or be associated with financial or legal consequences.

Children diagnosed with IED display:

- Verbal or physical aggression that occurs, on average, twice per week for three months but does not result in damage or injury to people or animals, **or**
- Behavioral outbursts that occur three or more times a year that do result in damage or injury to people or animals

Disruptive disorders often co-occur with other disorders such as ADHD. CD can also be a result of brain damage or past child abuse.

Pyromania

The essential feature of pyromania is the deliberate and purposeful setting of fires. It involves multiple episodes. The symptoms of this disorder include:

- Deliberately and purposefully setting a fire more than one time.
- Tension or emotional arousal being present before the act of setting the fire.
- Having a fascination with, interest in, curiosity about, or attraction to fire and its uses and consequences.
- Feeling pleasure, relief, or gratification when setting fires or when seeing the aftermath of a fire or the damage it caused.
- The fires are not set for monetary gain, to cover up criminal activity, to express anger or vengeance, in response to any hallucinations or delusions, or as a result of impaired judgment (from another disorder or substance).
- The firesetting is not better explained by CD, a manic disorder, or antisocial personality disorder.

Pyromania as a primary diagnosis appears to be very rare. In people incarcerated for repeated firesetting, only about 3 percent meet all the symptoms for pyromania. For more information on this disorder, please refer to the “Juvenile Firesetting” section of the *Collection*.

Kleptomania

Kleptomania is distinct from theft in that it involves the impulsive and unnecessary stealing of things that are not needed. Individuals may hoard the things they steal, give them away, or even return them to the store. The disorder is not about the objects stolen; it is about the compulsion to steal and the lack of self-control over this compulsion. Females with kleptomania outnumber males at a ratio of three to one.

Kleptomania typically follows one of three patterns of stealing: 1) brief episodes of stealing with intermittent and long periods of remission, 2) longer periods of stealing with brief periods of remission, or 3) chronic and continuous episodes of stealing with only minor fluctuation in frequency. Kleptomania is very rare, with a prevalence rate of 0.3 to 0.6 percent in the general population. Accordingly, it will not be discussed in this section of the *Collection*.

CAUSES AND RISK FACTORS

As with most psychiatric disorders, there is no single cause of these disorders. Rather, they arise out of a complex combination of risk and protective factors related to biological and environmental/social influences.

Researchers agree that there is a strong genetic and biological influence on the development of disruptive, impulse-control, and conduct disorders. These and related behavioral disorders (e.g., ADHD, substance use disorders, and mood disorders) tend to cluster in families. Parents of children with ODD often have mood disorders, while parents of children with CD are more likely to be depressed, to have issues of substance use, have schizophrenia or ADHD, and/or to have antisocial personality traits or behaviors.

Several social factors may also present a risk, including poverty, lack of structure, community violence, and dysfunctional family environment. Youth who are neglected through lack of parental supervision and positive parenting behaviors and/or who experience harsh treatment, including child abuse, are at higher risk. Those with deviant peer associations are also more likely to meet the criteria for these disorders. This may be because youth can learn deviant behaviors from others and can have their negative behavior patterns reinforced in deviant relationships.

EVIDENCE-BASED TREATMENTS

Although ODD, CD, and IED are considered separate diagnoses, the treatment principles for these disorders are very similar. Individualized treatment plans should be developed to address the particular problems and severity of each child and family situation.

A summary of treatments are outlined in Table 1.

Parent behavior management training is the primary intervention for disruptive, impulse-control, and conduct disorders. The key strategies of these approaches include the following:

- Identification and reduction of positive reinforcement of structured behavior
- Increased reinforcement of prosocial and compliant behavior
- Utilization of nonviolent and consistent discipline for disruptive behaviors
- Emphasis on predictability and immediacy of parental contingencies

Multisystemic therapy (MST) is an individualized case management program that incorporates many aspects of parent management and child social skills training for youth with serious behavior disorders who are at risk for out-of-home placement. MST attempts to intervene with the multiple factors that can contribute to antisocial behavior at the individual, family, and broader social levels, including peer, school, and neighborhood factors. Trained clinicians identify strengths in each youth's social network and capitalize on these to promote positive change. By helping both parents and youth to manage their lives more effectively, the need for out-of-home placement may be eliminated.

Table 1
Treatments for Disruptive, Impulse-Control, and Conduct Disorders

| What Works | |
|---|---|
| Parent management training (PMT) | <p>PMT programs focus on teaching and practicing parenting skills with parents or caregivers. Programs include:</p> <ul style="list-style-type: none"> • Helping the Noncompliant Child • Incredible Years • Parent-child interaction therapy • Parent MT to Oregon model |
| Multisystemic therapy (MST) | <p>MST is an intensive family- and community-based treatment that addresses the multiple determinants of serious antisocial behavior. MST clinicians use empirically validated approaches, such as cognitive-behavioral therapy and pragmatic family therapies, and typically provide individual and family counseling and 24-hour crisis management.</p> |
| Cognitive behavioral therapy (CBT) | <p>CBT emphasizes problem-solving skills and anger control/coping strategies.</p> |
| CBT & parent management training | <p>Combines CBT and PMT.</p> |
| What Seems to Work | |
| Multidimensional treatment foster care | <p>Community-based program alternative to institutional, residential, and group care placements for use with severe chronic delinquent behavior; foster parents receive training and provide intensive supported treatment within the home.</p> |
| Not Adequately Tested | |
| Atypical antipsychotics medications | <p>Risperidone (Risperdal), quetiapine (Seroquel), olanzapine (Zyprexa), and aripiprazole (Abilify); limited evidence for effectiveness in youth with ID or ASD.</p> |
| Stimulant or atomoxetine | <p>Methylphenidate, d-Amphetamine, atomoxetine; limited evidence when comorbid with primary diagnosis of ADHD.</p> |
| Mood stabilizers | <p>Divalproex sodium, lithium carbonate; limited evidence when comorbid with primary diagnosis of bipolar disorder .</p> |
| Selective serotonin reuptake inhibitors (SSRIs) | <p>Limited evidence when comorbid with primary diagnosis of depressive disorder.</p> |
| What Does Not Work | |
| Boot camps, shock incarcerations | <p>Ineffective at best; can lead worsening of symptoms.</p> |
| Dramatic, short-term, or talk therapy | <p>Little to no effect as currently studied.</p> |

Severe and persistent cases of ODD that develop into CD may require an alternative placement when the safety of the youth and/or those around him or her are in jeopardy. Youth may require out-of-home placement when they require crisis management services or when their family is unable or unwilling to collaborate with treatment. When considering day treatment, residential treatment, or hospitalization, the least restrictive setting should be selected for the shortest possible time to ensure safety and progress. Other placements that may be considered are therapeutic foster care or respite care.

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

Conduct Disorder Resource Center

http://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Conduct_Disorder_Resource_Center/Home.aspx

Oppositional Defiant Disorder Resource Center

http://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Oppositional_Defiant_Disorder_Resource_Center/Home.aspx

American Psychiatric Association (APA)

<https://www.psychiatry.org/>

American Psychological Association (APA)

<http://www.apa.org/>

Association of Behavior and Cognitive Therapies

<http://www.abct.org/Home/>

Mental Health America (MHA)

Fact Sheet on Conduct Disorder

<http://www.mentalhealthamerica.net/conditions/conduct-disorder>

Society of Clinical Child and Adolescent Psychology

<https://www.clinicalchildpsychology.org/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>

VIRGINIA RESOURCES AND ORGANIZATIONS

Virginia Commonwealth University Health System

Department of Psychiatry

<https://psych.vcu.edu/>

Virginia Treatment Center for Children (VTCC)

<https://www.chrichmond.org/services/virginia-treatment-center-for-children.htm>



SUBSTANCE USE DISORDERS

OVERVIEW

It is not uncommon for adolescents to experiment with a variety of substances, both legal and illegal. However, drug and alcohol use is a leading cause of morbidity and mortality among adolescents, and experimentation can lead to substance use disorder.

Studies have shown that children who experiment with substances at a young age are more likely to use other drugs later in life. These findings highlight the need to prevent drug initiation among adolescents and children or delay it for as long as possible.

Families should be aware of potential warning signs of drug use in adolescents. The first changes families often notice are in behavior and mannerisms. However, there are many warning signs, some of which include:

- Fatigue
- Red and glazed eyes
- Lasting cough
- Sudden mood changes
- Irresponsible behavior or poor judgment
- Depression
- Breaking rules and withdrawing from the family
- Loss of motivation or lack of interest in previous activities
- Negative attitude
- Drop in grades
- New friends that are less interested in standard home and school activities
- General discipline problems

The specific criteria used to diagnose substance use disorder are common across the classes of substances. Substance use disorder is diagnosed when there is a problematic pattern of substance use leading to significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

KEY POINTS

- Characterized by problematic pattern of substance use leading to clinically significant impairment or distress.
- Can include physical addiction, which is characterized by intense cravings, increased tolerance, and physical and mental withdrawal symptoms.
- Depending upon the substance, medically supervised detoxification may be required.
- Evidence-based treatments include cognitive behavioral therapy, family therapies, and multisystemic therapy.

- The substance is taken in larger amounts or over a longer period than originally intended.
- There are multiple unsuccessful attempts to stop usage, despite a strong desire to do so.
- A great deal of time is spent obtaining, using, or recovering from the effects of the substance.
- The individual experiences cravings or strong desire to use the substance.
- Recurrent use results in failure to fulfill major obligations at work, school, or home.
- Use continues despite persistent social or interpersonal problems caused by use.
- Important social, occupational, or recreational activities are given up or reduced because of use.
- Use continues in situations in which use is physically hazardous.
- Use continues despite knowing one has a physical or psychological problem that is likely to be caused or exacerbated by the substance.
- Tolerance, defined as requiring a markedly increased dose to achieve the desired effect, develops.
- Withdrawal symptoms occur, which lead the individual to use the substance in order to relieve the symptoms.

The severity of substance use disorder is estimated by the number of criteria present. An estimated two or three symptoms is mild, four or five is moderate, and six or more is severe.

Biological Process of Addiction

Addiction is a brain disease that develops over time. Long-term substance use can cause profound changes in brain structure and function, which can result in uncontrollable, compulsive drug or alcohol craving, seeking, and substance using.

Addiction occurs when substances of abuse hijack the reward center of the brain. The brain is designed to encourage life-sustaining and healthy activities through the release of the chemical dopamine. Dopamine not only causes feelings of pleasure, it also makes memory of that pleasure extremely salient, to ensure that pleasure-creating activities are repeated. Substances of abuse flood the brain's dopamine circuits with much more dopamine than natural rewards generate, causing feelings of euphoria. In addition, the presence of excess dopamine causes the brain to adapt by producing and absorbing less dopamine in a process called "tolerance." As an individual develops tolerance to a drug, the pleasure associated with it subsides, and he or she must take more of it to obtain the same dopamine reward and to ward off painful withdrawal symptoms. The result of this process is intense physical and mental craving. Eventually, the addicted individual becomes biologically and psychologically compelled to take the drug.

Drugs of Addiction

There are a variety of illegal drugs and legal substances that youth utilize. Legally available drugs include alcohol, prescribed medications, inhalants (fumes from glues, aerosols, and solvents), and over-the-counter cough, cold, sleep, and diet medications. The most commonly used illegal drugs are marijuana (pot), stimulants (such as cocaine, crack, meth, and speed), LSD, PCP, opiates, heroin, and designer drugs (such as MDMA, also called ecstasy or molly).

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) divides substances into the following ten classes:

1. Alcohol
2. Caffeine
3. Cannabis
4. Hallucinogens
 - Phencyclidine (PCP)
 - Other hallucinogens
5. Inhalants
6. Opioids
7. Sedatives, hypnotics, and anxiolytics
8. Stimulants
9. Tobacco
10. Unknown or other substances

Substance use disorder is a possible diagnosis in every class except caffeine. These classes are described in the paragraphs that follow.

Alcohol

Alcohol use disorder is characterized by a cluster of behavioral and physical symptoms, which can include withdrawal, tolerance, and craving. Withdrawal develops approximately four to 12 hours after the reduction of intake following prolonged, heavy alcohol ingestion. Once a pattern of repetitive and intense use develops, individuals with alcohol use disorder may devote substantial periods of time to obtaining and consuming alcoholic beverages. Withdrawal is unpleasant and triggers some individuals to continue consuming alcohol to avoid or reduce withdrawal symptoms. In addition, withdrawal can trigger life-threatening seizures in some people. Alcohol cravings, indicated by a strong desire to drink, can incite certain individuals to use alcohol in physically hazardous ways, such as while driving or swimming. Resulting damage from alcohol use disorder can include poor school performance, social and interpersonal problems, blackouts, depression, and serious medical problems such as liver disease.

Studies show that one form of substance abuse, binge drinking, damages the adolescent brain more significantly than the adult brain. Research suggests that adolescents are more vulnerable than adults to the impact of alcohol on learning and memory. Heavy drinking in early or middle adolescence, with resulting cortical damage, can also lead to diminished control over cravings for alcohol and to poor decision-making.

Caffeine

Caffeine can be found in coffee, tea, caffeinated soft drinks, energy drinks and similar aids, over-the-counter analgesics and cold remedies, weight-loss aids, chocolate and, increasingly, vitamins and food products. Symptoms of caffeine intoxication include restlessness, nervousness, excitement, insomnia, flushed face, diuresis, and gastrointestinal complaints. Symptoms at higher doses include muscle twitching, rambling thoughts and speech, tachycardia or cardiac arrhythmia, periods of seemingly unlimited energy, and psychomotor agitation. These signs may not occur in those who have developed a tolerance. Caffeine withdrawal symptoms

include headache with marked fatigue or drowsiness, dysphoric or depressed mood, irritability, difficulty concentrating, nausea, vomiting, or muscle pain and stiffness.

Cannabis

Cannabis, also known as marijuana, is used in several forms, including plant form and a concentrated extraction called hashish. It is typically smoked (via pipes or water pipes, or in cigarette or cigar form) or ingested. A new intake method, called vaporizing, involves heating plant material to release psychoactive cannabinoids for inhalation. Synthetic formulations are available in pill or capsule form for medical indications such as relieving nausea and vomiting from chemotherapy or stimulating appetite in individuals with AIDS. Cannabis has also been used to control seizures in persons with epilepsy who do not respond to other interventions.

Cannabis intoxication typically begins with a “high” feeling, followed by euphoria, inappropriate laughter and grandiosity, sedation, and lethargy. Additional symptoms include short-term memory impairment, difficulty completing complex mental processes, impaired judgment, distorted sensory perceptions, impaired motor performance, and the sensation that time is passing slowly. At times, cannabis use is accompanied by anxiety, dysphoria, or social withdrawal. Physical signs develop within two hours of cannabis use, including conjunctival injection (red, bloodshot eyes), increased appetite, dry mouth, and tachycardia.

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) recognizes the potential of cannabis withdrawal syndrome, symptoms of which include irritability, anger or aggression, anxiety, depressed mood, restlessness, difficulty sleeping, and decreased appetite or weight loss.

Although cannabis use disorder can co-occur with other substance use disorders, this is uncommon.

Hallucinogens

Phencyclidine (PCP)

Phencyclidine (PCP or angel dust) and similar substances are referred to as dissociative hallucinogens. They produce feelings of separation from the mind and body in small doses, and stupor and coma can result at high doses. These substances include phencyclidine, ketamine, cyclohexamine, and dizocilpine. They are often smoked or taken orally, but they can also be snorted or injected. While these drugs are often used in an illicit manner, ketamine is also used to help treat major depressive disorder.

The primary effects of PCP last for a few hours, but the drug stays in the body eight days or more. The DSM-5 separates PCP intoxication from intoxication by other hallucinogens. Common symptoms of PCP intoxication include disorientation, confusion without hallucination, hallucinations or delusions, catatonic-like state, and coma of varying severity.

Other hallucinogens

Many hallucinogens are chemically different from one another but, as a group, they produce similar perception, mood, and cognition alterations in users. These substances are typically taken orally, but they are sometimes smoked. Duration of hallucinogenic effects varies depending upon the substance taken. Tolerance may develop

to hallucinogens, but hallucinogen tolerance does not create a cross-tolerance with other drug categories, such as amphetamines or cannabis.

Hallucinogen use may lead to hallucinogen persisting perception disorder, characterized by a sober individual re-experiencing perceptual disturbances. These persistent disturbances can happen either episodically or almost continually, and may last for weeks, months, or years. The disturbances are typically visual, including geometric hallucinations, false perceptions of movement in peripheral vision, intensified or flashing color, and trails of visual images. Additional disturbances include hallucinating entire objects, experiencing positive after-images and halos, and misperceiving the size of images.

The DSM-5 does not include hallucinogenic withdrawal syndrome as a criterion for abuse or as a diagnosis because clinically significant withdrawal syndrome has not been consistently documented in humans. However, there is some evidence of hallucinogenic and stimulant withdrawal symptoms associated with MDMA (also called ecstasy or molly).

Inhalants

Inhalants are volatile hydrocarbons: toxic gases from glues, fuels, paints, and other volatile compounds. Inhalant intoxication develops during or immediately following volatile hydrocarbon substance inhalation, and the intoxication ends several minutes to several hours after inhalation. At times, inhalation is completed by inhaling substances within a closed container, like a plastic bag over the head. Inhalation may cause unconsciousness, anoxia, and death. Sudden death may also occur, often from cardiac arrhythmia or arrest or from the toxicity of the substance inhaled.

Inhalant use disorder exists when use persists even when the user knows the substance is causing serious problems. Lingering odors and peri-oral or peri-nasal rash may suggest the presence of the disorder. Medical complications like brain white matter pathology and rhabdomyolysis, in which muscle fibers break down and release into the bloodstream, is also a possible indication of inhalant use disorder.

Opioids

Opioids relieve pain and induce euphoria. Some opioids are illegal, such as heroin, while others are used by medical professionals to treat pain and are available by prescription. The brain also manufactures natural opioids, which human beings naturally crave. This natural craving, combined with the intense pleasure opioids can induce, can be a dangerous combination that can lead to abuse.

Opioid use disorder is the compulsive, prolonged self-administration of opioids for no legitimate medical purpose, or the use of opioids in great excess of what is needed to treat a medical condition. Prescription forms of opioids are sometimes acquired by falsifying or exaggerating medical conditions or by visiting several physicians for the same disorder (called “doctor shopping”). In addition, prescription opioids are sometimes easily accessible in the family home, which poses a significant risk to youth and adolescents.

Symptoms of opioid intoxication include initial euphoria followed by apathy, dysphoria, and psychomotor agitation or impairment. Impaired judgment also occurs. Most individuals with opioid use disorder have

developed significant tolerance to the drugs, and discontinuation causes withdrawal symptoms. Withdrawal can also occur independently of opioid use disorder and regardless of whether use is medical or recreational. In addition, other disorders can be induced by opioid use, such as opioid-induced depressive disorder, opioid-induced anxiety disorder, opioid-induced sleep disorder, and opioid-induced sexual dysfunction.

Overdose of opioids can result in respiratory depression, which can result in death.

Sedatives, Hypnotics, and Anxiolytics

Several drug types are included in the sedatives, hypnotics, and anxiolytics category. These include benzodiazepines, benzodiazepine-like drugs, carbamates, barbiturates, barbiturate-like hypnotics, all prescription sleeping medications, and almost all prescription anti-anxiety medications. One type of substance omitted from this category is nonbenzodiazepine antianxiety medications because they are not significantly misused.

These drugs are brain depressants and act similarly to alcohol. Individuals who misuse sedatives, hypnotics, or anxiolytics typically crave the substance and may mix it with other medicines and substances. Symptoms of intoxication associated with a substance use disorder include inappropriate sexual or aggressive behavior, marked fluctuation of mood, and impaired judgment. Additionally, intoxication may include slurred speech, lack of coordination to the level of causing falls or difficulty driving, unsteady gait, cognitive impairment, and stupor or coma. Clinicians can also look for nystagmus, or fast, uncontrollable eye movements. As with all substance use disorders, impaired social or occupational functioning also results.

Tolerance and withdrawal can occur with sedative, hypnotic, or anxiolytic use and can be very significant. However, tolerance and withdrawal that occur as a result of appropriate medical use does not meet the criteria for a substance use disorder. Sedatives, hypnotics, and anxiolytics are often prescribed to offset or alleviate effects of other substance use disorders. Nevertheless, with regular use, tolerance develops, and the affected individual must take more of the substance to reach desired effects.

Withdrawal from sedatives, hypnotics, and anxiolytics typically occurs after several weeks of use, and it is similar to alcohol withdrawal. Symptoms include increased heart and respiratory rate, elevated blood pressure or body temperature, and sweating, along with hand tremors, nausea occasionally with vomiting, insomnia, and anxiety. Another possible symptom of withdrawal is psychomotor agitation, which is unintentional motor activity manifested as fidgeting, pacing, and hand-wringing. As many as 20 to 30 percent of individuals treated for sedative, hypnotic, or anxiolytic withdrawal may experience grand mal seizures. The time between last dose and onset of withdrawal symptoms depends upon the substance. For example, withdrawal symptoms from triazolam can begin within a few hours, while withdrawal symptoms from diazepam (which lasts much longer in the body) may take one to two days to develop.

Stimulants

Stimulants include amphetamines and amphetamine-type substances (such as cocaine, crack cocaine, and methamphetamine). Stimulants are typically taken orally, intravenously, or by being inhaled. Stimulant medications are often prescribed for obesity, attention-deficit/hyperactivity disorder (ADHD), and narcolepsy.

Stimulant use disorder can develop within one week of onset of use, and tolerance occurs regardless of whether a substance use disorder develops. Stimulants stimulate the central nervous system and produce psychoactive and sympathomimetic effects. Dopamine levels increase in the brain, causing intense pleasure and increased energy or, in some cases, anxiety and paranoia. With repeated use, stimulants can disrupt the dopamine system, reducing an individual's ability to feel pleasure. Long term effects include panic attacks, paranoid psychosis, and increased risk for heart attacks.

Withdrawal symptoms include hypersomnia (excessive daytime sleepiness or prolonged nighttime sleep), increased appetite, and dysphoria. Occasionally, vivid and unpleasant dreams will also occur, and appetite will increase. Additionally, intense depressive symptoms that resolve within one week often signal stimulant withdrawal.

Tobacco

Tobacco use disorder typically occurs in those who smoke or use tobacco products daily, but not in those who do not use tobacco daily or who use nicotine medications such as smoking cessation aids. Individuals who are not used to using tobacco often feel nausea and dizziness upon use, symptoms that are more pronounced with the first use of tobacco each day. Those with tobacco use disorder typically do not experience these symptoms. Most tobacco users report strong cravings when they do not use tobacco for several hours, and many tobacco users chain smoke (smoke cigarettes all day with no break in between cigarettes). Tobacco users may forego social events for a lack of tobacco-friendly areas.

When tobacco use is stopped, very distinct withdrawal symptoms occur. These symptoms are much stronger in users who smoke or use smokeless tobacco than in those who use nicotine medications. The symptomatic discrepancy is potentially because of the higher levels of nicotine in cigarettes and smokeless tobacco in comparison to levels in nicotine medications. People who have ceased tobacco use often experience a heart rate decline of five to 12 beats per minute and a weight increase of four to seven pounds.

Unknown or Other Substance

The DSM-5 provides for diagnostic criteria for a substance use disorder with unknown origin unrelated to the substances listed above. The following substances meet this criterion:

- Anabolic steroids
- Nonsteroidal anti-inflammatory drugs
- Cortisol
- Antiparkinsonian medications
- Antihistamines
- Nitrous oxide
- Anyl-butyl- or isobutyl-nitrites
- Betel nut, chewed in many cultures for mild euphoria and a floating sensation
- Kava, often taken for sedation, incoordination, weight loss, mild hepatitis, and lung abnormalities
- Cathinones, which produce a stimulant effect

Unknown substance use disorder is associated with an intoxicant the individual cannot identify or with new illegal drugs that are not yet identified.

Intoxication by unknown substances is challenging to diagnose. Clinicians may ask for patient history to determine whether the youth experienced similar symptoms in the past and if the youth knows a street name for the substance.

CAUSES AND RISK FACTORS

While nobody knows which youth will develop serious substance use problems, certain adolescents are at higher risk for developing substance use disorder. These youth include those:

- With a family history of substance use disorders;
- Who are depressed or anxious;
- Who have low self-esteem; and/or
- Who feel like they don't fit in or are out of the mainstream.

Table 1 outlines additional risk factors, including those associated with the individual and the family. While none of these factors guarantee an adolescent will develop substance use disorder, families should be cognizant of the potential risks.

EVIDENCE-BASED TREATMENTS

Treatment for substance use disorders is delivered at varying levels of care in many different settings. Because no single treatment is appropriate for every youth or adolescent, treatments must be tailored for the individual. Settings include:

Outpatient/Intensive Outpatient: Child and adolescent substance abuse treatment is most commonly offered in outpatient settings. When delivered by well-trained clinicians, this can be highly effective. Outpatient treatment is traditionally recommended for adolescents with less severe addictions, few additional mental health problems, and a supportive living environment, although evidence suggests that more severe cases can be treated in outpatient settings as well. Outpatient treatment varies in the type and intensity of services offered and may be delivered on an individual basis or in a group format. Low- or moderate-intensity outpatient care is generally delivered once or twice a week. Intensive outpatient services are delivered more frequently, typically more than twice a week for at least three hours per day. Outpatient programs may offer substance use prevention programming focused on deterring further drug use or other behavioral and family interventions.

Table 1
Risk Factors for Substance Use Disorder in Adolescents and Teens

| Type of Risk Factor | Description |
|-------------------------|--|
| Family Risk Factors | <ul style="list-style-type: none"> • Inadequate supervision from the family • Inconsistent or severe discipline from the family • Poor communication • Family tension and conflicts • Broken homes |
| Individual Risk Factors | <ul style="list-style-type: none"> • History of early childhood negative and aggressive behavior or physical or sexual abuse • Being an older adolescent Caucasian male • Emotional, social, or academic problems • Poor impulse control or thrill-seeking behaviors • Emotional instability • Very low perception of the dangers inherent in drug use |
| Other Risk Factors | <ul style="list-style-type: none"> • Low socioeconomic status • Level of education • Living in a high crime and drug-use neighborhood • Ease of drug availability • Peer-group pressure • History of mental illness |

Partial Hospitalization: Youth with more severe substance use disorders but who can still be safely managed in their home living environment may be referred to a higher level of care called partial hospitalization or “day treatment.” This setting offers adolescents the opportunity to participate in treatment four to six hours a day at least five days a week while living at home.

Residential/Inpatient Treatment: Residential treatment is a resource-intense high level of care, generally for youth and adolescents with severe levels of addiction whose mental health and medical needs and addictive behaviors require a 24-hour structured environment to make recovery possible. These adolescents may have complex psychiatric or medical problems or family issues that interfere with their ability to avoid substance use. One well-known, long-term residential treatment model is the therapeutic community (TC). TCs use a combination of techniques to “resocialize” the adolescent and enlist all the members of the community, including residents and staff, as active participants in treatment. Treatment focuses on building personal and social responsibility and developing new coping skills. Such programs offer a range of family services and may require family participation if the TC is sufficiently close to where the family lives. Short-term residential programs also exist.

Once the treatment setting has been determined, numerous methods are used to treat children and adolescents with substance use disorders. These treatments are discussed in the following paragraphs and are outlined in Table 2.

Table 2
Summary of Treatments for Substance Use Disorder

| What Works | |
|---|--|
| Cognitive behavioral therapy (CBT) | A structured therapeutic approach that involves teaching youth about the thought-behavior link and working with them to modify their thinking patterns in a way that will lead to more adaptive behavior in challenging situations. |
| Family therapy Multidimensional family therapy (MDFT) Functional family therapy (FFT) | Family-based therapy is aimed at providing education, improving communication and functioning among family members, and reestablishing parental influence through parent management training. MDFT views drug use in terms of networks of influences (individual, family, peer, community) and encourages treatment across settings in multiple ways. FFT is best used in youth with conduct and delinquent behaviors along with substance use disorders combining relationship with CBT interventions to change relationship patterns and improve the family's functioning. |
| Multisystemic therapy (MST) | An integrative, family-based treatment with a focus on improving psychosocial functioning for youth and families. |
| What Seems to Work | |
| Behavioral therapies | Behavioral therapies focus on identifying specific problems and areas of deficit and working on improving these behaviors. |
| Motivational interviewing (MI) Motivational enhancement therapy (MET) | MI is a brief treatment approach aimed at increasing motivation for behavior change. It is focused on expressing empathy, avoiding argumentation, rolling with resistance, and supporting self-efficacy. MET is an adaptation of MI that includes one or more client feedback sessions in which normative feedback is presented and discussed. |
| Medication | Some medication can be used for detoxification purposes, as directed by a doctor. Medication may also be used to treat co-existing mental health disorders. |
| Not Adequately Tested | |
| Multifamily educational intervention (MEI) | MEI combines psycho-educational and family interventions for troubled adolescents and their families. |
| Adolescent group therapy (AGT) | The AGT intervention incorporates adolescent therapy groups on stress management, developing social skills, and building group social support. |
| Interpersonal and psychodynamic therapies | Interpersonal and psychodynamic therapies are methods of individual counseling that are often incorporated into the treatment plan and focus on unconscious psychological conflicts, distortions, and faulty learning. |

Table 2 (continued)
Summary of Treatments for Substance Use Disorder

| | |
|---------------------------|---|
| Client-centered therapies | A type of therapy focused on creating a non-judgmental environment, such that the therapist provides empathy and unconditional positive regard. This facilitates change and solution making on behalf of the youth. |
| Psychoeducation | Programs aimed at educating youth on substance use and may cover topics like peer pressure and consequences of substance use. |
| Project CARE | A program aimed at raising awareness about chemical dependency among youth through education and training. |
| Twelve-step programs | A twelve-step program that uses the steps of Alcoholics Anonymous as principles for recovery and treating addictive behaviors. |
| Process groups | A type of psychotherapy that is conducted in a small group setting. Groups can be specialized for specific purposes and therapy utilizes the group as a mechanism of change. |
| Neurofeedback | A type of non-invasive brain training that enables an individual to learn how to change mental and/or physiological activity. |

Psychological Treatments

The numerous psychological treatments used to treat youth with substance use disorders are discussed below.

Cognitive Behavioral Therapy (CBT)

The goal of CBT is the identification and modification of maladaptive thinking patterns to reduce negative thoughts, feelings, and behavior. For substance abusers, the focus of this intervention is generally relapse prevention. CBT can help the adolescent develop greater self-control; identify environmental and internal triggers leading to relapse; and develop strategies for dealing with stressors, triggers, and lapses into substance use. The role of clinicians is to aid the youth in anticipating the problems that they are likely to meet and to help them to develop effective coping strategies. The two main elements of CBT are functional analysis, identifying the thoughts and feelings before and after substance use, and skills building, such as ways to overcome peer pressure and increase pleasant activities. CBT also addresses social skills, anger control, and problem-solving.

Family Therapy

Although family therapy is considered an important modality in the treatment of adolescents with substance use disorders, clinicians and consumers should be aware that family therapy is a very broad term that encompasses a large number of treatment programs. Not all of these family therapies have been tested with children and adolescents with substance use disorder. Thus, it is important and relevant to ask “what kind of family therapy” when family therapy is recommended. Common elements across most family therapies include:

- Engaging the family (versus working with the child alone);
- Focusing on education about substance use and abuse;
- Emphasizing communication skills to improve family functioning; and
- Reestablishing parental influence through parent management training.

Though family therapy is important, it may be contraindicated if family members actively abuse substances, are violent, deny that the youth's substance use is problematic, or remain unreasonably angry.

One program with empirical support is Multidimensional Family Therapy (MDFT), an outpatient, family-based treatment for adolescents with serious substance abuse issues. This approach views drug use in terms of a network of influences (individual, family, peer, community) and encourages treatment across settings in multiple ways. Sessions may be held in a clinic, home, court, school, or other community locations. For the child or adolescent, the emphasis of treatment is on skill-building, and the treatment plan often incorporates practicing developmental tasks such as decision-making, negotiation, problem-solving, performing vocational skills, communication, and dealing with stress. Parallel sessions are held with family members, in which parents examine their parenting style, learn to distinguish influence from control, and learn to have a positive and developmentally appropriate influence on their child. Research supports the use of this type of therapy for adolescents with substance use disorders.

Another well-established therapy method is Functional Family Therapy (FFT). FFT is best used in youth with conduct and delinquent behaviors along with substance abuse. This short-term process combines relationship with CBT interventions to change relationship patterns and improve the family's functioning. FFT is specifically designed for youth ages 12 to 18, and is successful across locations and ethnic groups. The effects of FFT endure years after treatment, at times into adulthood, and can positively impact siblings of affected youth as well.

A method of strategic family therapy has also been tested and found effective with substance using adolescents: Brief Strategic Family Therapy (BSFT). BSFT attempts to reduce negative behaviors, promote positive behaviors such as school attendance and performance, and improve family functioning. Clinicians typically administer 12 to 16 family sessions in convenient locations, at times even in the family home.

Multisystemic Therapy (MST)

MST aims to address the multifaceted nature of antisocial behavior at the individual, family, and community levels. This form of therapy is intended to address serious antisocial behavior in children and adolescents who abuse substances. Therapeutic efforts target the child's behavior within the context of the family environment, the school environment, and the neighborhood and community. MST helps develop a support network of extended family, neighbors, and friends to help caregivers achieve and maintain such changes. Treatment occurs in each of the child's natural settings. MST is associated with significant, long-term reduction of aggressive behaviors in chronic and violent juvenile offenders.

RESOURCES AND ORGANIZATIONS

American Academy of Pediatrics Committee on Substance Abuse

Substance Use Screening, Brief Intervention, and Referral to Treatment for Pediatricians
<http://pediatrics.aappublications.org/content/pediatrics/early/2011/10/26/peds.2011-1754.full.pdf>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Association for Applied Psychophysiology and Biofeedback (AAPB)

<https://www.aapb.org>

Food and Drug Administration (FDA)

Risk Evaluation and Mitigation Strategy (REMS) (Extended-Release and Long-Acting Opioid Analgesics)
<http://er-la-opioidrems.com/lwgUI/remis/home.action>

Mental Health America (MHA)

<http://www.mentalhealthamerica.net/>

National Alliance for the Mentally Ill (NAMI)

<https://www.nami.org/>

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

<https://www.niaaa.nih.gov/>

National Institute on Drug Abuse (NIDA)

<https://www.drugabuse.gov/>

Office of Juvenile Justice and Delinquency Prevention (OJJDP)

<https://www.ojjdp.gov/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Stop Underage Drinking

Portal of Federal Resources

<https://casaa.unm.edu/ctn/ctn%20mod%20to%20kit/Prevention/Stop%20Underage%20Drinking%20%20Portal%20of%20Federal%20Resources.htm>

Substance Abuse and Mental Health Services Administration (SAMHSA)

<https://www.samhsa.gov/>

The GAINS Center for Behavioral Health and Justice Transformation

<https://www.samhsa.gov/gains-center>

VIRGINIA RESOURCES AND ORGANIZATIONS

Virginia Department of Behavioral Health and Developmental Services (DBHDS)

<http://www.dbhds.virginia.gov/>

Virginia Department of Health

Opioid Addiction in Virginia

<http://www.vdh.virginia.gov/commissioner/opioid-addiction-in-virginia/>



YOUTH SUICIDE

OVERVIEW

Most teenagers experience stress while growing up. Stressors can include societal pressures to adhere to cultural norms, pressure to succeed, divorce within a family, and financial difficulty. Youth may view suicide as the answer to these stressors if proper treatment is not rendered in time.

Suicide is a leading cause of death for 10- to 24-year-olds. However, deaths from suicide are only part of the problem. Each year, approximately 157,000 youth between the ages of 10 and 24 receive medical care for self-inflicted injuries at emergency departments across the U.S.

KEY POINTS

- Suicide is the leading cause of death for 10- to 24-year-olds.
- 90 percent of adolescents who commit suicide suffer from at least one psychiatric disorder at the time of death.
- No evidence-based interventions have been identified. Cognitive behavioral therapy and dialectical behavior therapy, in conjunction with appropriate medication therapy, are promising interventions.
- Early intervention is critical. Families should be alert to warning signs.

Nationwide, firearms are the most common method of suicide for youth, followed by suffocation and poisoning.

It is important to note that, although non-suicidal self-injury (NSSI) is very serious, the individual's intention and ambivalence about the outcome distinguish it from suicidal behavior. A more detailed discussion of this disorder is included in the "Non-Suicidal Self-Injury" section of the *Collection*.

RISK FACTORS

While there are important risk factors to note, the presence of risk factors does not necessarily mean a youth will commit suicide. It is important to have a communication system in place that allows the youth to express his or her feelings. Talking about suicide is difficult, but with more open communication and less stigmatization, it could be an easier subject to broach.

Families and friends should be aware of the warning signs of suicide and should seek help immediately if they believe a family member or friend is contemplating suicide. Table 1 outlines risk factors that may increase the likelihood of a suicide attempt.

Table 1
Factors that Put Youth at Risk of Suicide

| Risk Factors | Description |
|-------------------------|--|
| General risk factors | <ul style="list-style-type: none"> • Past suicide attempts, especially with methods other than ingestion or superficial cutting • Being diagnosed with a mood or conduct disorder • Substance use, especially among males • Aggression or fighting • Living alone or in a violent community • Currently depressed, manic, hypomanic, and/or severely anxious • Irritable, agitated, delusional, or hallucinating • Experiencing physical and/or sexual abuse • Family history of suicide and suicide attempts |
| Mental health disorders | Studies have shown that as many as 90 percent of adolescents who committed suicide suffered from at least one psychiatric disorder at the time of death, and that more than half suffered from a psychiatric disorder for at least two years preceding the event. The most common disorders include major depressive disorder, bipolar disorder, substance abuse, and conduct disorder. |
| Environmental stressors | Stress has been identified as a precipitator for suicide. One national study reported that 35 percent of youth suicides occurred the same day those youth experienced a crisis, such as a relationship breakup or an argument with a parent. Another study found that non-intimate-partner relationship problems, such as issues with parents or friends, preceded over 51 percent of suicides in the study, and a crisis that occurred in the past two weeks preceded 42.4 percent of suicides. |
| Bullying | Being the victim of school bullying or cyberbullying is associated with substantial distress, and researchers have found a clear relationship between bullying (victimization and perpetration) and suicidal ideation. |
| Sexual orientation | Among lesbian, gay, bisexual, and transgender (LGBT) adolescents, a history of attempted suicide, impulsivity, prospective LGBT victimization, and limited social supports were linked to increased risk for suicidal ideation. |
| Exposure to suicide | Sometimes the suicide rate among adolescents rises following a highly publicized suicide. This likelihood of co-occurring suicide is also referred to as “contagion” or “clustering.” Co-occurring suicide may occur when a classmate or someone with whom the youth has a personal relationship commits suicide. The associations between both ideation and attempts remained for at least two years after the initial exposure, suggesting that intervention and therapy should extend past the first few months following a suicide. |
| Sleep disturbance | Sleep disturbance has been associated with an elevated risk of suicide in youth. Assessing sleeping patterns may assist in assessing the presence of suicidal ideation and depression. |
| Access to firearms | Having firearms in the home is associated with both suicide attempts and suicide completion. |

INTERVENTIONS

Currently there are no interventions that have been deemed evidence-based. Despite limitations in the literature, there is research to support the use of some techniques over others. A summary of interventions is included in Table 2.

Table 2
Interventions for Youth Suicide

| What Works | |
|--|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Selective serotonin reuptake inhibitors (SSRIs) | These antidepressants may help reduce suicidal ideation; however, in some individuals they may cause suicidal ideation. Youth taking SSRIs must be closely monitored. |
| Cognitive behavioral therapy (CBT) Dialectical behavior therapy (DBT) | These psychotherapies have both shown promise in reducing suicidal ideation in some youth when paired with appropriate medication therapy. Other psychotherapies, such as interpersonal therapy for adolescents, psychodynamic therapy, and family therapy, may also be effective. |
| SOS (signs of suicide) prevention program | A school-based education and screening program that teaches students to recognize warning signs of depression and suicidality in themselves or their peers. |
| Not Adequately Tested | |
| Gatekeeper training | Involves educating youth, parents, and caregivers in warning signs of suicide to encourage early intervention. |
| What Does Not Work | |
| Tricyclic antidepressants | Not recommended; effectiveness has not been demonstrated, and older tricyclic antidepressants are lethal in overdose quantities. |
| No-suicide contracts | Designed as an assessment tool, not a prevention tool. Studies on effectiveness in reducing suicide are inconclusive and their use is discouraged, as they may be interpreted as being coercive or may encourage suicide in some individuals. |

Selective serotonin reuptake inhibitors (SSRIs) may be successful in reducing suicidal ideation and suicide attempts in non-depressed adults with certain personality disorders. However, it is necessary to closely monitor youth taking SSRIs, as there is some evidence that suggests that SSRIs can increase suicidality in youth and young adults under age 24. A more detailed discussion of the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

Psychotherapy, although not in itself an evidence-based practice, is an important component to the treatment of suicidality in youth. Cognitive behavioral therapy (CBT) has seen promising results in recent years. When paired with the appropriate pharmacological treatments, CBT can be effective in reducing suicidal ideation. In addition, dialectical behavior therapy (DBT) has promise for youth with borderline personality disorder and recurrent suicidal ideation and behaviors.

The SOS Signs of Suicide Prevention Program (ages 11-13 and 13-17) is a universal, school-based education and screening program that teaches students to recognize warning signs of depression and suicidality in themselves or their peers and to seek help from a trusted adult. The screenings within the SOS Program are informational, not diagnostic. The goal of the screening is to identify students with symptoms consistent with depression and/or suicidality and to recommend a complete professional evaluation.

RESOURCES AND ORGANIZATIONS

American Association of Suicidology

1-800-273-TALK (8255)

<http://www.suicidology.org/>

American Foundation for Suicide Prevention

<https://www.afsp.org/>

Anxiety and Depression Association of America

<https://adaa.org/>

Association for Behavior and Cognitive Therapies

<http://www.abct.org>

Children's Safety Network

<http://www.childrenssafetynetwork.org>

Jason Foundation, Inc.

<http://jasonfoundation.com/>

National Alliance for the Mentally Ill (NAMI)

<http://www.nami.org>

National Center for Injury Prevention and Control

Suicide Prevention Activities

800-CDC-INFO (232-4636)

<http://www.cdc.gov/violenceprevention/suicide/index.html>

National Institute of Mental Health

<https://www.nimh.nih.gov>

National Organization for People of Color Against Suicide (NOPCAS)

<http://nopcas.org>

National Strategy for Suicide Prevention

<http://actionallianceforsuicideprevention.org>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Society for the Prevention of Teen Suicide

<http://www.sptsusa.org>

Suicide Awareness/Voices of Education (SA/VE)

<http://www.save.org>

Suicide Prevention Resource Center (SPRC)

<http://www.sprc.org>

Substance Abuse and Mental Health Services

<http://www.samhsa.gov>

VIRGINIA RESOURCES AND ORGANIZATIONS

Virginia Department of Health

Suicide Prevention Program

<http://www.vdh.virginia.gov/suicide-prevention/>

Virginia Suicide Prevention Resource Directory

<http://www.vdh.virginia.gov/content/uploads/sites/53/2016/11/2016SuicidePreventionResourceDirectory4thEdFINAL.pdf>

National Crisis Hotlines

The National Suicide Prevention Lifeline

1-800-273-Talk (8255)

TTY: 1-800-799-4889

Veterans: Press 1

Spanish: Press 2

Military One Source

(24 Hour Resource for Military Members, Spouses and Families)

1-800-342-9647

LGBT Youth Suicide Hotline

Trevor Project

1-866-488-7386

Virginia Crisis Centers and Hotlines

Information provided by Virginia Department of Health Suicide and Youth Violence Prevention Program and local providers.

ACTS Helpline

Serving Dumfries, Manassas City and Manassas Park

Hotline: 703-368-4141

1-800-273-TALK (8255)

<https://www.actspwc.org/>

Concern Hotline

Clarke Hotline: 540-667-0145

Frederick Hotline: 540-667-0145

Page Hotline: 540-743-3733

Shenandoah Hotline: 540-459-4742

Warren Hotline: 540-635-4357

Winchester Hotline: 540-667-0145

The Crisis Center

Bristol Hotline: 800-273-8255

<http://www.crisiscenterinc.org/>

Crisis Line of Central Virginia

Lynchburg Crisis Line:

800-947-HELP (4357); 888-947-9747

CrisisLine of Norfolk

Norfolk Crisisline 24 Hours / 7 Days:

757-622-1126

CrisisLink

Arlington and the Washington Metropolitan area

Hotline: 703-527-4077

Madison House – Charlottesville

Hotline: 804-295-8255

<http://www.madisonhouse.org/>

The Raft Crisis Hotline

Blacksburg Emergency & Assessment

Crisisline 24 Hours / 7 Days:

540-961-8400

<http://www.nrvcs.org/>

West End Behavioral Healthcare

Richmond City Hotline: 804 819-4100

Martinsville-Henry County 24 Hours / 7 Days:

540-632-7295

Franklin County: 540-489-5490

Patrick County: 540-694-2962

Teenline: 540-634-5005



ANTIDEPRESSANTS AND THE RISK OF SUICIDAL BEHAVIOR

OVERVIEW

Research indicates that as many as 11 percent of adolescents will experience depression. Because depression substantially increase the risk of suicide, much focus has been placed on measuring the effectiveness of treatments. This is particularly true for adolescents because depression in that age group is a strong indicator of suicidal behavior.

Currently, only one pharmacological treatment has been approved for use with youth with depressive disorders by the Food and Drug Administration (FDA). This medication, fluoxetine (a selective serotonin reuptake inhibitor [SSRI]), has been approved by the FDA for treating children eight years of age or older. More research has been completed on fluoxetine than any other SSRI.

However, research has also revealed a possible relationship between suicidal thoughts or actions and the use of SSRIs in children and adolescents with depression. This section outlines the benefits and risks associated with fluoxetine use in children and adolescents with depression.

FOOD AND DRUG ADMINISTRATION ADVISORY STATEMENT

In response to findings that antidepressant use in pediatric patients had the potential to increase suicidal thinking and behavior, the FDA directed manufacturers to add a black-box warning to the health professional label on antidepressants. A summary of key points in this labelling is outlined in Figure 1.

The FDA also recommended that clinicians should screen for bipolar disorder, because symptoms of depression may be part of a bipolar episode and antidepressants used alone may trigger a mixed/manic episode in these at-risk patients, which may contribute to suicidal thinking or behavior.

In addition, dosage appears to be a contributing factor. One study found that younger patients who began treatment with higher-than-recommended doses of antidepressants were more than twice as likely to try to harm themselves as those who were initially treated with the same drugs at lower, recommended doses. The risk of suicide attempts seemed to be highest in the first 90 days on the medications.

KEY POINTS

- Research has revealed a link between suicidal thoughts and use of SSRI medications in children.
- Fluoxetine (SSRI) is currently the only medication approved for children suffering from depression.
- Children taking SSRIs must be carefully monitored for suicidal thinking and behavior.

In response to the black-box warning, practitioners such as pediatricians and family practitioners have ceased prescribing antidepressants to children and have begun to refer patients to child and adolescent psychiatrists.

Figure 1

Key Points of FDA Black-Box Warning Label For Suicidality and Anti-Depressant Drugs

- Antidepressants increase the risk of suicidal thinking and behavior in children and adolescents with MDD and other psychiatric disorders.
- Anyone considering the use of an antidepressant in a child or adolescent for any clinical use must balance the risk of increased suicidality with the clinical need.
- Taper dosage to prevent risks of discontinuation syndrome if stopping SSRI treatment.
- Patients who are started on antidepressant therapy should be observed closely for agitation, irritability, clinical worsening, suicidality, or unusual changes in behavior.
- Families and caregivers should be advised to closely observe the patient and to communicate with the prescriber.
- A statement regarding whether the particular drug is approved for any pediatric indication(s) and, if so, which one(s), should be present.

EFFECTIVENESS OF SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIs) VERSUS THE RISK OF SUICIDALITY

When making decisions about the risks associated with antidepressants, particularly SSRIs, it is important to understand the limitations of the research. Suicidality can be very difficult to measure as these events are rare, and the statistical method used to evaluate the risk associated with treating children and adolescents with antidepressants can only be used in studies where a minimum of one adverse event has taken place. Conversely, a study that fails to detect a significant increase in suicidal risk associated with antidepressant medication does not necessarily indicate that there is not a risk.

A full review the current literature on the benefits and risks associated with antidepressant use in children and adolescents with depression is provided in the *Collection, 6th Edition*.

In summary, an evaluation of the risk-benefit ratio of using fluoxetine with children and adolescents diagnosed with depression has revealed that the benefits associated with treating moderately to severely depressed youth with this SSRI can outweigh the risks. Outcomes can be improved and risks of suicidal thinking and behavior can be reduced by combining cognitive-based therapy with fluoxetine. It is imperative, however, that when antidepressants are prescribed, youth should be closely monitored by both parents and clinicians. Additional information about effective treatments for youth with depression is located in the “Depressive Disorders” section of the *Collection*.



NONSUICIDAL SELF-INJURY

OVERVIEW

The terms self-injury, parasuicide, deliberate self-harm, self-abuse, self-mutilation, self-inflicted violence, or cutting is the deliberate harming of one's body, resulting in tissue damage, without the intent of suicide. It does not include culturally-sanctioned activities, including tattoos or actions within a religious or cultural ritual. The information contained in this section addresses nonsuicidal self-injury (NSSI). For additional information on self-inflicted injury with suicidal intent, see the "Youth Suicide" section of the *Collection*.

NSSI occurs without regard for age, gender, ethnicity, or socioeconomic status; however, much research is centered on adolescents, as this behavior tends to begin during teen years. Family members can look for signs of self-injury, including:

- Scratching (excoriation)
- Cutting
- Burning
- Hitting or biting oneself
- Ingesting or embedding toxic substances or foreign objects
- Hair pulling
- Interfering with wound healing

This list is not exclusive, and families may also see other types of personal harm. Children who self-harm may exhibit more than one form of self-injurious behavior.

It is not always clear whether an act of self-harm should be categorized as NSSI or as a suicide attempt because the intended outcome is not certain. Suicide attempts are not always lethal and NSSI may be lethal. Furthermore, this distinction may not be important since NSSI is one of the strongest predictors of suicide ideation and future suicide attempts.

Repeated shallow but painful injuries that the youth inflicts on his or her body are the critical feature of NSSI. Youth most frequently injure the top of the forearm or thigh with knives, needles, razors, or other sharp objects,

KEY POINTS

- Characterized by deliberate harming of one's body, resulting in tissue damage, without the intent of suicide.
- Sometimes used to regulate emotion through the release of endorphins, which can temporarily reduce negative emotions such as tension, anxiety, and self-reproach.
- No evidence-based treatments have been identified at this time.
- Treatments such as cognitive behavioral therapy aim to replace NSSI with healthier coping skills.

and they often create several cuts or scratches in a single session. Commonly, these cuts bleed and leave scars. Injury may also be caused by stabbing, burning, or causing burns by rubbing the skin with another object. Other forms of self-injury discussed in this *Collection* are trichotillomania and excoriation (skin-picking) disorder, discussed in the “Obsessive-Compulsive and Related Disorders” section. Stereotypic self-injury, such as head banging, self-biting, or self-hitting, may be connected to developmental delay.

Suicide attempts and NSSI are thought to serve different functions, with suicide being used as a way to escape from pain and NSSI used to regulate emotion. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) notes the most common purpose of NSSI is to reduce negative emotions such as tension, anxiety, and self-reproach. In certain cases, the injury is conceived as a deserved self-punishment to make up for acts that harmed or distressed others. The youth may then report an immediate sensation of relief that occurs during the process.

Some reasons that youth may engage in NSSI include:

- Distracting from emotional pain (this is most common)
- Punishing oneself
- Relieving tension
- Sense of being real by feeling pain or seeing evidence of injury
- Numbing feelings; to not feel anything
- Experiencing a sense of euphoria
- Communicating pain, anger, or other emotions to oneself or others
- Nurturing oneself through the caring for wounds

Studies show that females self-injure more frequently than males. While self-injury typically begins in adolescence, it may begin earlier or later and can continue into adulthood.

CAUSES AND RISK FACTORS

Researchers have identified many risk factors associated with NSSI, which are outlined in Figure 1.

Studies have shown that adolescents with any comorbid condition are at increased risk of NSSI and those with greater than two comorbid conditions have nearly three times the risk of developing the disorder. Specific comorbid conditions revealed in research include obesity, alcoholism, borderline personality disorder (BPD), and suicidal behavior disorder (discussed in the Youth Suicide section of the *Collection*).

Research has indicated that there is a clear familial component to NSSI, but point out that it is still uncertain whether this is due to genetics, environment, or both. Relatives of individuals who have engaged in NSSI are three times more likely to engage in such behavior themselves. Patients diagnosed with BPD often grow up in environments where emotional expression goes unrecognized or is punished, the outcome being that emotional regulation skills are underdeveloped. There is also consistent evidence to support a genetic component for impulsivity, affective instability, and aggression—all risk factors for NSSI.

Figure 1
Risk Factors Associated With NSSI

- | | |
|---|--|
| <ul style="list-style-type: none">• Risk taking and reckless behavior• Childhood sexual abuse• Childhood physical abuse• Neglect• Family violence during childhood• Family alcohol abuse• Childhood separation and loss• Single parent family• Parental illness or disability• Poor emotional regulation skills, which can be due to family environments in which emotional expression is unrecognized or punished | <ul style="list-style-type: none">• Poor security with childhood attachment figures• Emotional reactivity• Emotional intensity• Hopelessness• Loneliness• Anger• Alcohol use or alcoholism• Obesity• Comorbid mental health condition, especially borderline personality disorder and suicidal behavior disorder |
|---|--|

TREATMENT

No evidence-based treatments for NSSI have been identified at this time. Table 1 lists available treatments for NSSI.

NSSI represents a pattern of behavior, rather than a single isolated event, and is perpetuated through both positive and negative reinforcement. For example, NSSI is positively reinforced when the adolescent experiences a sense of control or relaxation following self-harm. NSSI is negatively reinforced when the adolescent experiences distressing or unpleasant emotions and or thoughts—for example, sadness, loneliness, emptiness, emotional pain, and self-hatred—following self-harm. Therefore, many experts believe that interventions aimed at reducing NSSI should focus on strengthening emotion regulation skills. This approach varies from interventions aimed at reducing suicidal behavior, which instead help the adolescent identify reasons for living.

An important treatment element for youth who have engaged in NSSI is the establishment of a strong therapeutic alliance between the youth and the service provider. Once the alliance is formed, an important treatment goal is to reduce and ultimately eliminate NSSI by replacing it with healthier coping skills. Another recommended component is the establishment and maintenance of meaningful connections between adolescents and their families.

Cognitive behavioral therapy (CBT) is one treatment for NSSI that has been tested. The premise of CBT for NSSI is to reduce NSSI behaviors by helping clients develop new coping skill sets, address motivational obstacles during treatment, and promote skill generalization outside the therapy setting. Dialectical behavioral therapy (DBT) is effective for the treatment of NSSI among adults and thus has received a lot of attention. However, its effectiveness for children and adolescents is still being tested.

Table 1
Summary of Treatments for Nonsuicidal Self-Injurious Behavior

| What Works | |
|---|---|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | CBT involves providing skills designed to assist youth with affect regulation and problem solving. |
| Dialectical behavior therapy (DBT) | DBT emphasizes acceptance strategies and the development of coping skills. |
| Not Adequately Tested | |
| Problem solving therapy | Designed to improve an individual's ability to cope with stressful life experiences. |
| Medication | Evidence of the effectiveness of the use of medications, such as high-dose SSRIs, atypical neuroleptics, and opiate antagonists, is limited. In addition, some medications have been shown to increase suicidal ideation in children and adolescents. |
| Hospitalization | Because effectiveness is not consistently demonstrated, should be reserved for youth who express intent to die. |

RESOURCES AND ORGANIZATIONS

Anxiety and Depression Association of America (ADAA)

<https://adaa.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

Cornell Research Program on Self-Injurious Behaviors (CRPSIB)

<http://www.selfinjury.bctr.cornell.edu/>

Mental Health America (MHA)

<http://www.mentalhealthamerica.net/>

National Alliance of Mental Health

Self-Harm

<https://www.nami.org/Learn-More/Mental-Health-Conditions/Related-Conditions/Self-harm>

National Institute of Mental Health

<https://www.nimh.nih.gov>

National Suicide Prevention Lifeline

1-800-273-TALK (8255)

<https://suicidepreventionlifeline.org/>

S.A.F.E. Alternatives (Self-Abuse Finally Ends)

800-DON'T CUT (366-8288)

<https://selfinjury.com/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>



JUVENILE OFFENDING

OVERVIEW

The juvenile brain is not fully mature. For this reason, young people are less able to use good judgment and are more prone to influence from family, school, peers, and community. In addition, stress, peer pressure, and immediate reward are more likely to influence their behavior than the behavior of adults. This can result in offending behaviors that bring youth in contact with the juvenile justice system.

Although most youth who have a mental health disorder do not become involved in the juvenile justice system, youth who do become involved often have a mental health disorder. Studies indicate that approximately 50 to 75 percent of the 2 million youth encountering the juvenile justice system in the US met criteria for a mental health disorder.¹ In Virginia, more than 92 percent of juveniles committed to the Department of Juvenile Justice have significant symptoms of attention-deficit/hyperactivity disorder (ADHD), conduct disorder (CD), oppositional defiant disorder (ODD), or a substance use disorder, and more than 64 percent of admitted juveniles had significant symptoms of other mental health disorders.² Such numbers are particularly troubling when compared to the general youth population, among which only about 20 percent of youth suffer from a diagnosable mental health disorder.

Some behaviors that lead to justice system involvement are directly influenced by symptoms of mental health disorders, including impulsivity, anger, and cognitive misperceptions. In other cases, mental health problems lead to problems like substance use or social isolation, which may increase the likelihood of rule-violating behaviors. Mental health problems frequently go undetected in juvenile offenders, increasing the likelihood that these juveniles will have persistent difficulties. Screening and assessment of juvenile offenders helps determine how the juvenile justice system can address their treatment needs, and treating these disorders may help youth

KEY POINTS

- 50 to 75 percent of juvenile offenders have one or more mental health disorders, which frequently go undetected.
- Offenders who receive appropriate mental health and (if appropriate) substance abuse treatment are less likely to re-offend.
- Evidence-based treatments include multisystemic therapy, functional family therapy, and Treatment Foster Care Oregon.

¹ Underwood, L. A., & Washington, A. (2016). Mental illness and juvenile offenders. *International Journal of Environmental Research and Public Health*, 13(2), 228.

² Virginia Department of Juvenile Justice (VDJJ). (2016). *Data resource guide for fiscal year 2016*. Retrieved from http://www.djj.virginia.gov/pdf/about-djj/DRG/FY16_DRG.pdf

overcome other causes of juvenile delinquency. Common mental health disorders seen among juvenile offenders include:

- Conduct disorder (CD)
- Oppositional defiant disorder (ODD)
- Major depressive disorder and persistent depressive (dysthymic) disorder
- Anxiety disorders
- Bipolar disorder
- Attention-deficit/hyperactivity disorder (ADHD)
- Posttraumatic stress disorder (PTSD)
- Substance use disorders

RISK AND PROTECTIVE FACTORS

Figure 1 outlines factors that may make it more or less likely that youth will enter the juvenile justice system. No single risk or protective factor can predict whether a youth will become a juvenile offender, but the more risk factors and fewer protective factors present, the greater the likelihood of delinquent behavior. For this reason, reducing risk factors and promoting protective factors may help keep youth out of the juvenile justice system.

Figure 1
Risk and Protective Factors Affecting Entrance Into the Juvenile Justice System

| | | |
|---------------------------|---|--|
| Protective Factors | <ul style="list-style-type: none"> • High self esteem • High expectations • Structure and rules at home • Positive attitudes about school • Access to adults with whom the child can discuss problems • Involvement in learning • Secure attachment to caregivers • Sense of belonging | |
| Risk Factors | <ul style="list-style-type: none"> • Impulsiveness • Substance use • Antisocial or aggressive beliefs and attitudes • Aggressive responses to shame • Inadequate command of behaviors • High emotional distress • Weak connection to school • Chronic school truancy • Learning difficulties or low school achievement • Involvement with delinquent peers or gangs | <ul style="list-style-type: none"> • Lack of involved adults in community • Experiencing child abuse and neglect • Disengaged family, or family members engaged in delinquent or criminal behavior • Parental substance abuse • Parental or caregiver use of harsh or inconsistent discipline • Exposure to violence in the home or community • Lack of appropriate supervision • Having one or more mental health disorders |

EVIDENCE-BASED TREATMENTS

Heightened awareness of mental health disorders has led to increased research and new treatment practices in the juvenile justice system. Among delinquent juveniles who receive structured, meaningful, and sensitive treatment, recidivism rates are 25 percent lower than those in untreated control groups, and highly successful programs reduce rates of recidivism by as much as 80 percent.³ Treatment should be gender responsive and should integrate recent advances in trauma-based care. It should also involve families as fully as possible in the treatment of their children. Treatments are outlined in Table 1.

It is important to note that delinquent behaviors have many causes, and just as there is no one way to understand these behaviors, there is not one ideal treatment approach. Reducing delinquent behaviors is most likely when the context of the behavior is understood, and when that youth's specific risk and protective factors are addressed.

Although several of the following treatment approaches may be applied and utilized in the institutional setting, this discussion refers to the application of these approaches in a community setting.

Multisystemic Therapy

Multisystemic therapy (MST) is an integrative, family-based treatment that focuses on improving psychosocial functioning in youth and families with the goal of reducing or eliminating the need for out-of-home placements. MST addresses the numerous factors that shape serious antisocial behaviors in juvenile offenders while focusing on the youth and his or her family, peers, school, and neighborhood/community support. The underlying premise of MST is that the behavioral problems in children and adolescents can be improved through the interaction with or between two or more of these systems.

MST has an extensive body of research to support its effectiveness in juveniles who have emotional and behavioral problems. It is considered to be an effective, intensive, community-based treatment for justice-involved youth. Evaluations have shown reductions of up to 70 percent in long-term rates of re-arrest, reductions of up to 64 percent in out-of-home placements, improvements in family functioning, and decreased mental health problems.⁴

Functional Family Therapy

Functional family therapy (FFT) is a family-based prevention and intervention program that integrates established clinical therapy, empirically supported principles, and extensive clinical experience. FFT is often used for youth ages 11 to 18 who are at risk for and/or presenting with delinquency, violence, substance use, conduct disorder, oppositional defiant disorder, or disruptive behavior disorders. This model allows for intervention in complex problems through clinical practice that is flexibly structured, culturally sensitive, and accountable to

³ Coalition for Juvenile Justice. (2000). Handle with care: Serving the mental health needs of young offenders coalition for juvenile justice. 2000 Annual Report.

⁴ National Mental Health Association (NMHA). (2004). Mental health treatment for youth in the juvenile justice system: A compendium of promising practices. Chicago, IL: MacArthur Foundation.

Table 1
Summary of Treatments for Juvenile Offenders

| What Works | |
|--------------------------------------|---|
| Multisystemic therapy (MST) | An integrative, family-based treatment with a focus on improving psychosocial functioning for youth and families. |
| Functional family therapy (FFT) | A family-based program that focuses on delinquency, treating maladaptive and “acting out” behaviors, and identifying obtainable changes. |
| Treatment Foster Care Oregon (TFCO) | As an alternative to corrections or residential treatment, TFCO places juvenile offenders with carefully trained foster families who provide youth with close supervision, fair and consistent limits, consequences, and a supportive relationship with an adult. The program includes family therapy for biological parents, skills training and supportive therapy for youth, and school-based behavioral interventions and academic support. |
| What Seems to Work | |
| Family centered treatment (FCT) | FCT seeks to address the causes of parental system breakdown while integrating behavioral change. FCT provides intensive in-home services and is structured into four phases: joining and assessment, restructuring, value change, and generalization. |
| Brief strategic family therapy | A short-term, family-focused therapy that focuses on changing family interactions and contextual factors that lead to behavior problems. |
| Aggression replacement therapy (ART) | A short-term, educational program that focuses on anger management and provides youth with the skills to demonstrate non-aggressive behaviors, decrease antisocial behaviors, and utilize prosocial behaviors. |
| Cognitive behavioral therapy (CBT) | A structured, therapeutic approach that involves teaching youth about the thought-behavior link and working with them to modify their thinking patterns in a way that will lead to more adaptive behavior in challenging situations. |
| Dialectical behavior therapy (DBT) | A therapeutic approach that includes individual and group therapy components and specifically aims to increase self-esteem and decrease self-injurious behaviors and behaviors that interfere with therapy. |

families. FFT focuses on treating youth who exhibit delinquency and maladaptive “acting out” behaviors by seeking to reduce them by identifying obtainable changes.

Treatment Foster Care Oregon

Treatment Foster Care Oregon (TFCO) (formerly Multidimensional Treatment Foster Care) recruits, trains, and supervises foster families to provide youth with close supervision, fair and consistent limits and consequences, and a supportive relationship with an adult. As an alternative to corrections, it places juvenile offenders who require residential treatment with these carefully trained foster families. TFCO also provides individual and

family therapy, educational programming, and psychiatric care. It is effective in reducing delinquent behaviors, justice system contacts, substance use, depression, and teen pregnancy and promotes both rehabilitation and public safety. During the placement timeframe, the youth's biological or adoptive family also receives family therapy to further the goal of returning the youth to that family.

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

<https://www.aacap.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

National Center for Juvenile Justice (NCJJ)

<http://www.ncjj.org/>

National Center for Mental Health and Juvenile Justice (NCMHJJ)

<https://www.ncmhjj.com>

National Child Traumatic Stress Network

<https://www.nctsn.org/>

National Council of Juvenile and Family Court Judges

<https://www.ncjfcj.org/>

Office of Juvenile Justice and Delinquency Prevention (OJJDP)

<https://www.ojjdp.gov>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

VIRGINIA RESOURCES AND ORGANIZATIONS

Virginia Department of Behavioral Health and Developmental Services (VDBDHDS)

<http://www.dbhds.virginia.gov/>

Virginia Department of Criminal Justice Services (VDCJS)

<http://www.dcjs.virginia.gov/>

Virginia Department of Juvenile Justice (VDJJ)

<http://www.djj.virginia.gov/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>

ARTICLE

Lipsey, M. (2009). The primary factors that characterize effective interventions with juvenile offenders: a meta-analytic overview. *Victims and Offenders*, 4(4):124–147.

https://www.researchgate.net/publication/228662112_The_Primary_Factors_that_Characterize_Effective_Interventions_with_Juvenile_Offenders_A_Meta-Analytic_Overview



JUVENILE FIRESETTING

OVERVIEW

When juvenile delinquency is mentioned, arson is not usually the first type of offense that comes to mind. However, between 2007 and 2011, the National Fire Protection Association (NFPA) reported that 282,600 intentional fires were reported to U.S. fire departments each year, and 40 percent of individuals arrested for these events were less than 18 years of age. Even more disturbing is that almost 85 percent of the victims of fires started by children are the children themselves, with 80 deaths and 860 injuries occurring annually. Although legal definitions of arson vary from state to state, a juvenile may be charged with arson when an evaluation of the event reveals sufficient evidence of malicious and willful firesetting.

KEY POINTS

- Children set fires for a wide variety of reasons.
- Pyromania is an extremely rare disorder and is not usually the cause of juvenile firesetting.
- Children who deliberately set fires should be evaluated by a therapist or other professional.
- Fire safety education and cognitive behavioral therapy are common treatments.

Families can prevent firesetting by following a few rules, such as the following from the U.S. Fire Administration:

1. Teach children that matches and lighters are not toys.
2. Never allow children to play with lighters or matches. About half of fires started by children are caused by children playing with matches and lighters.
3. Keep all matches and lighters out of the reach of children. Store in a high cabinet, preferably locked.
4. Do not leave young children unattended.
5. Teach young children to tell a grown-up when they see matches or lighters. Praise children when they tell you about found matches and lighters.
6. If a child is overly interested in fire, has played with matches and lighters, or has started a fire, the family must address this natural curiosity immediately and teach the child about the dangers of fire. In this event, call your local fire department and ask if they have a juvenile firesetters intervention program.

If a school-age child intentionally sets fires, even after being appropriately disciplined, families must consider getting professional help. Intervention is even more important if the child is setting fires to larger items or in instances where the flames can easily spread, causing injury and damage.

CAUSES AND RISK FACTORS

Children set fires for a variety of reasons, including curiosity about fire, crying for help, or engaging in delinquent behavior. Some of the reasons youth set fires include the following reason outlined in Table 1.

Table 1
Reasons for Juvenile Firesetting

| Reasons | Description |
|---------------------------|---|
| Curiosity | A child sets a fire to learn more about fires and how they can be set. |
| Crisis motivated | A child sets a fire because they feel they have lost power. The fire gives them a false sense of mastery. |
| Delinquent firesetting | A child sets a fire to rebel against authority. |
| Pathological firesetting | A severely disturbed youth may set fires because of a severe mental disorder. |
| Cognitive impairment | A cognitively-impaired child may set a fire because they lack good judgment. |
| Sociocultural firesetting | A child sets a fire because of peer pressure, external pressures, or religious motives. |

There is little consensus regarding specific risk factors or characteristics common to all juvenile firesetters because the factors are widely variable. The evidence suggests that the cause for firesetting in juveniles is likely a complex interplay between environmental, psychological, and biological factors.

The concept of fire interest has consistently been associated with firesetting behavior in multiple studies and has been identified as a risk factor for recidivism. In addition, early experiences with fire, early exposure to firesetting, and previous intentional firesetting behaviors are associated with juvenile firesetting behavior.

Being male is frequently reported as a risk factor for firesetting. Substance use, specifically alcohol and cannabis, is another common risk factor. In addition, children who have been experienced emotional and physical abuse are more likely to have a history of firesetting than children who did not experience abuse.

Children with firesetting behaviors were more likely than other juvenile offenders to have received mental health treatment and to have had suicidal thoughts in the past. Conduct disorder and attention-deficit/hyperactivity disorder (ADHD) have been associated with juvenile firesetting in some studies. Research also suggests that firesetting may be an attempt by the youth to regulate difficult cognitive, social, and/or emotional experiences. These actions may serve to change the youth's current state of feelings by deliberately setting a fire, which in turn changes their current negative sensation. Firesetting can become a sensation-seeking practice for youth.

Some firesetting may be precipitated by a crisis and the subsequent need of a child's need to assert control over the self or the environment. For these children, fire, as a powerful element, may offer a sense of mastery and competence. Depression, ADHD, or family stress may accompany this type of firesetting.

Delinquent-motivated firesetting conceptualizes the use of fire as one way of acting out against authority. These children rarely show empathy but tend to avoid harming others. Given that firesetting is one of 15 symptoms for conduct disorder, it makes sense to explore the relationship between delinquency and firesetting.

Pathological-motivated firesetting is the rarest of the motivations seen by practitioners in this field and describes a severely disturbed juvenile. It includes those who are actively psychotic, acutely paranoid or delusional, or who have lived in chronically disturbed and bizarre environments. A small, rare subtype of this group may meet criteria for pyromania. Pyromania is discussed in the “Disruptive, Impulse Control, and Conduct Disorders” section of the *Collection*.

Other variables linked to juvenile firesetting include peer pressure, curiosity, mental health and substance abuse problems, and lack of adult supervision. Research has also found a relationship between involvement in firesetting and parents/caregivers who smoke, due to the availability of matches and cigarette lighters and because the purposive use of fire is familiar to the juvenile.

TREATMENTS

Currently, there are no evidence-based treatment approaches for the juvenile firesetting population. However, many treatments have proven beneficial in the management of this behavior. These treatments are appropriately applied to firesetters with consideration for their age and are outlined in Table 2.

Cognitive behavioral therapy (CBT) and fire safety education (FSE) are found to significantly curtail firesetting and match play behaviors up to a year after intervention. Firefighter home visits (FHV) have also been shown to significantly decrease the likelihood of juvenile firesetting. However, structured treatments designed to intervene with children who set fires were still found to have greater effect in the long-term than brief visits with a firefighter. Both CBT and FSE were also shown to be effective at reducing other activities associated with firesetting, such as playing with matches and being seen with matches or lighters.

Regardless of the seriousness of an incident or the child’s motive in starting a fire, education regarding fire should be part of the intervention strategy. Education should include information about the nature of fire, how rapidly it spreads, and its potential for destructiveness. Information about how to maintain a fire-safe environment, utilize escape plans and practice, and use fire appropriately has been shown to be an effective component of comprehensive arson intervention programs, at least for younger youth.

Social skills training may also help juveniles who have trouble expressing their emotions. These skills include asking for help, making friends, solving problems, responding to failure, answering complaints, expressing affection, and negotiating.

Table 2
Summary of Treatments for Juvenile Firesetting

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Cognitive behavioral therapy (CBT) | Structured treatments designed to intervene with children who set fires. Because firesetting is a maladaptive behavior, CBT is a reasonable intervention to consider for behavior modification. |
| Fire safety education | Education includes information about the nature of fire, how rapidly it spreads, and its potential for destructiveness, as well as information about how to maintain a fire-safe environment, utilizing escape plans and practice, and the appropriate use of fire. |
| Firefighter home visit | Firefighters visit homes and explain the dangers of playing with fire. |
| What Does Not Work | |
| Ignoring the problem | Leaving youth untreated is not beneficial because they typically do not outgrow this behavior and behavior may increase. |
| Satiation | Satiation, the practice of repetitively lighting and extinguishing fire, may cause the youth to feel more competent around fire and may actually increase the behavior. |
| Burning the juvenile | Burning a juvenile to show the destructive force of fire is illegal and abusive. It will not decrease the likelihood of the juvenile setting fires or treat the problem. |
| Scaring the juvenile | Scare tactics may produce the emotions or stimulate the actions the clinician is trying to prevent, particularly when family or social issues may trigger firesetting. Scare tactics may also trigger defiance, avoidance, or may even increase the likelihood that firesetting traits continue. |

RESOURCES AND ORGANIZATIONS

Association for Behavior and Cognitive Therapies

<http://www.abct.org>

Federal Emergency Management Agency (FEMA)

<https://www.usfa.fema.gov/>

Office of Juvenile Justice and Delinquency Prevention (OJJDP)

<https://www.ncjrs.gov/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Youth Firesetting Information Repository & Evaluation System (YFIRES)

<https://yfires.com/>

VIRGINIA RESOURCES AND ORGANIZATIONS

Virginia Department of Fire Programs (VDFP)

<https://www.vafire.com/>

Virginia Tech

Child Study Center

<http://childstudycenter.wixsite.com/childstudycenter>

Psychological Services Center

<https://www.psyc.vt.edu/outreach/psc>



SEXUAL OFFENDING

OVERVIEW

Juvenile sexual offenders can be defined as youth who commit any sexual interaction with persons of any age against their will, consent, or in an aggressive, exploitative, or threatening manner. While the majority of juvenile sexual offenders are between puberty and the age of legal majority, a small number of juvenile offenders are younger than 12 years of age. Sexually abusive behaviors can vary from non-contact offenses to contact offenses. A contact offense requires unwanted physical contact with a victim. With a non-contact offense, the perpetrator has no physical contact with the victim (e.g., Internet crimes). Juvenile sexual offenders' behaviors have the potential to

cause significant harm to others and also have significant legal ramifications. It is important to note that it is not until the youth has been found guilty or adjudicated in a court of law that the term "juvenile sexual offender" is technically accurate. However, the term "juvenile sexual offender" will be utilized in this section since much of the research on youth who engage in sexually abusive behavior utilizes this term.

Juvenile sexual offenders are fundamentally different from adults in their cognitive capabilities and their ability to regulate emotions and control behavior. Juveniles also have less capacity than adults in weighing the consequences of their actions. Research demonstrates the regions of the brain associated with foresight and planning continue to develop well beyond adolescence. These factors must be acknowledged in the assessment and treatment of juvenile sexual offenders.

Research has shown that there are two types of juvenile sexual offenders: those who target children, and those who offend against their peers or against adults. Moreover, there are also differences in motivation. Some offenders have histories of violating the rights of others, some are sexually curious, and some have serious mental health issues or poor impulse control.

A significant proportion of juvenile sexual offenders may present with a diverse range of disordered behaviors, such as aggressive behavior, bullying, vandalism, firesetting, cruelty to animals, shoplifting, and drug/alcohol abuse. However, juvenile sexual offenders differ from their adult counterparts in that juveniles typically do not

KEY POINTS

- Sexual abusive behaviors include contact offenses (unwanted or forced sexual contact) and non-contact offenses (e.g., internet crimes).
- 90 percent of juvenile sexual offenders are male, and 80 percent have one or more mental health disorders.
- Previous sexual victimization is correlated with later sexually abusive behavior.
- Multisystemic therapy and cognitive behavioral therapy that specifically targets sexual offending is the preferred treatment.

present with the same types of sexual deviancy and psychopathic tendencies that may be observed among adult offenders.

In general, 90 percent of all juvenile sexual offenders are male. Of that number, a significant portion of those ages 12 to 14 years target four- to seven-year-old boys. By contrast, older offenders tend to abuse older female victims, peaking with 15- to 17-year-old boys targeting 13- to 15-year-old girls. This suggests that teen offenders targeting boys seek younger, sexually immature boys rather than peers, and older teen offenders target sexually mature females.

Figure 1 outlines the characteristics of sexually abusive juveniles.

Figure 1
Characteristics of Sexually Abusive Juveniles

- Perpetrators are typically adolescents, age 12 to 17.
- Perpetrators are predominantly male.
- Perpetrators have difficulties with impulse control and judgment.
- Up to 80 percent of perpetrators have a diagnosable psychiatric disorder.
- Between 30 to 60 percent of perpetrators exhibit learning disabilities and academic dysfunction.

Preliminary research indicates that juvenile sexual offenders share some characteristics other than sexual offending, including:

- High rates of learning disabilities and academic dysfunction
- Attention-deficit/hyperactivity disorder
- The presence of other behavioral problems and conduct disorder
- Difficulties with impulse control and judgment

Ignoring comorbid mental health disorders may compromise the efficacy of structured sex offender treatment. Treatment for the comorbid mental health disorder may sometimes be provided simultaneously with other forms of sexual offender treatment. However, if the juvenile offender is psychotic, manic, or severely depressed, treatment in an inpatient setting may be necessary.

CAUSES AND RISK FACTORS

The causes of juvenile sexual offending are not well understood. However, sexual and physical abuse, child neglect, and exposure to family/domestic violence are all factors associated with juvenile sexual offending. There is strong evidence that indicates that sexual victimization in childhood plays a role in the development of sexually abusive behavior in adolescents. For this reason, clinicians should consider incorporating principles of trauma-informed care into evidence-based sex offender treatment models. Early trauma paves the way for maladaptive coping and interpersonal deficits, which can lead to abusive behavior.

Female sexual offending has been under-reported and under-represented in sexual offender literature, but preliminary research has revealed that many of these females had very disruptive and tumultuous childhoods, with high levels of trauma and exposure to dysfunction with post-traumatic stress disorder (PTSD) being especially prevalent. Compared to those of juvenile males, the histories of females in these studies reflected even more extensive and pervasive childhood maltreatment by both females and males. They were also victimized at younger ages and were more likely to have had multiple perpetrators. In prepubescent female sexual offenders, rates of sexual victimization tends to be extraordinarily high, with rates greater than 90 percent.

TREATMENTS

Once a juvenile sexual offender has been identified, careful assessment is critical so that his or her needs can be matched to the correct type and level of treatment. Ideally, the assessment will indicate the level of danger that the juvenile presents to the community, the severity of psychiatric and psychosexual problems, and the juvenile's amenability to treatment. All available participants should be included in the assessment process, including the youth, his or her parents or guardians, and all other professionals involved, such as teachers, case workers, social workers, and mental health treatment providers. It should be expected that the youth and his or her family may be at various psychological stages, ranging from complete denial to full acknowledgment of the sexual offense(s). For this reason, it is important that full acknowledgment of offending behaviors and their impact on others is a primary goal of treatment. Decisions about whether an adolescent sexual offender should remain in the same home as the victim of his or her offense should be made carefully on a case-by-case basis. The decision may involve input from a variety of professionals (e.g., child protection workers, therapists, etc.). It is essential that the community and other children be protected from potential harm, both physical and psychological.

Research has demonstrated that the overall prognosis for children with sexual behavior problems is good and that sexually abusive juveniles benefit from treatment. Although there are no evidence-based treatments at this time, promising sexual offender treatment programs often combine an intensive, multi-modal approach with early intervention. Comprehensive treatment may focus on taking responsibility for one's sexual behavior, developing victim empathy, and developing skills to prevent future offending. A summary of promising treatments is provided in Table 1.

When seeking professional services for sexual offenders, it is prudent to ensure that the qualifications of the service provider indicate expertise in the treatment of sexual offenders. One way to ensure such expertise is to select a professional with this certification (CSOTP). Qualifications include a minimum of a master's or doctoral degree in a selected field or a Doctor of Medicine (M.D.) or Doctor of Osteopathic Medicine (D.O.) degree from an institution that is approved by an accrediting agency recognized by the Virginia Board of Medicine. Qualifications also include 50 hours of sex offender treatment-specific training; 2,000 hours of post-degree clinical experience, 200 of which must be face-to-face treatment/assessment of sexual offenders; and 100 hours of face-to-face supervision within the 2,000 hours experience with a minimum of six hours per month. A minimum of 50 hours shall be in individual, face-to-face supervision.

Table 1
Summary of Treatments for Sexually Offending Youth

| What Works | |
|---|--|
| There are no evidence-based practices at this time. | |
| What Seems to Work | |
| Multisystemic therapy for problem sexual behaviors (MST-PSB) | An intensive family- and community-based treatment that addresses the multiple factors of serious antisocial behavior in juvenile sexual abusers. |
| Cognitive behavioral therapy (CBT) Children with problematic sexual behavior CBT (PBS-CBT) | Treatment modalities that provide cognitive-behavioral, psychoeducational, and supportive services. |
| Not Adequately Tested | |
| Medication | There is no research validation for the use of medication targeting sexually deviant behavior in youth and only limited methodologically sound research to guide in the treatment of adults. |

Multisystemic Therapy for Problem Sexual Behaviors (MST-PSB)

MST-PSB is an intensive family- and community-based treatment that addresses the multiple factors of serious antisocial behavior in juvenile sexual abusers. Treatment can involve any combination of individual, family, and extra familial factors (e.g., peer, school, or neighborhood). MST-PSB promotes behavior change in the juvenile's natural environment, using the strengths of the juvenile's family, peers, school, and neighborhood to facilitate change.

Like standard multisystemic therapy, MST-PSB specifies a model of service delivery rather than a manualized treatment with sequential session content. It utilizes several standard interventions, including individual (e.g., social skills training, cognitive restructuring of thoughts about offending), family (e.g., caregiver skills training, communication skills training, marital therapy), peer (e.g., developing prosocial friendships, discouraging affiliation with delinquent and drug-using peers), and school levels (e.g., establishing improved communication between caregivers and school personnel, promoting academic achievement). The overarching goal of MST-PSB is to empower caregivers (and other important adult figures) with the skills and resources needed to address the youth's problem sexual behaviors and any other behavior problems. Services are delivered to the youth and their caregivers in home, school, and neighborhood settings at times convenient to the family (including evenings and weekends), with intensity of treatment matched to clinical need. Client contact hours are typically higher in the initial weeks of treatment (three to four times per week if indicated) and taper off during a relatively brief course of treatment (five to seven months on average).

Cognitive Behavioral Therapy (CBT)

CBT is the most common treatment for juvenile sexual offenders. One form of CBT that has positive results is Children with Problematic Sexual Behavior–Cognitive Behavioral Therapy (PSB-CBT). The primary goal of PSB-CBT is to reduce and eliminate sexual behavior problems among school-age children. The program provides cognitive-behavioral, psychoeducational, and supportive services to children referred to the program for sexual behavior problems and their families. Intermediate goals are to increase awareness of sexual behavior rules and expectations, strengthen parent-management skills, improve parent-child communications and interactions, improve children's self-management skills related to coping and self-control, improve children's social skills, and decrease children's internalizing and externalizing behaviors. Interventions are offered in community-based and/or residential settings and are primarily delivered in individual and/or group therapy sessions, although family sessions are frequently incorporated as well.

Female Juvenile Sexual Offenders Treatment

Because assessment and treatment tools have only been validated on male offenders and are primarily tested on adult subjects, it is unclear how effective they are with juvenile female offenders. Preliminary research suggests that traditional psychological evaluation (e.g., intellectual and personality assessment) may be of more value with female juvenile offenders, and treatment approaches should address the early and repetitive developmental traumas experienced by these offenders. Furthermore, female juvenile sexual offenders may benefit from a focus on the unique considerations of gender issues, including sexual and physical development, intimacy and social skills, self-image, self-esteem, impulsivity, comorbid symptoms of PTSD, and the common societal expectation of females as caregivers/nurturers.

VIRGINIA'S SEXUAL OFFENDER TREATMENT PROGRAM

Currently, the Virginia Department of Juvenile Justice (VDJJ) provides cognitive-behavioral sexual offender evaluation and treatment services. These are provided in specialized treatment units and in the general population.

Inpatient and moderate treatment is delivered in a group format in self-contained units for high-risk juveniles, with inpatient treatment more intensive than moderate treatment. Prescriptive treatment is delivered individually as needed. Juveniles in sex offender treatment units receive intensive treatment by a multidisciplinary treatment team that includes a community coordinator, counselor, and specially trained therapists. Specialized sex offender treatment units offer an array of services, including individual, group, and family therapy. Each juvenile receives an individualized treatment plan that addresses programmatic goals, competencies, and core treatment activities. Successful completion of sex offender treatment may require six to 36 months depending on treatment needs, behavioral stability, and motivation of the juvenile. The median treatment time is approximately 18 months.

RESOURCES AND ORGANIZATIONS

American Academy of Child & Adolescent Psychiatry (AACAP)

<https://www.aacap.org/>

Association for Behavior and Cognitive Therapies (ABCT)

<http://www.abct.org>

Association for the Treatment of Sexual Abusers

<http://www.atsa.com/>

Center for Sex Offender Management (CSOM)

<http://www.csom.org/>

Child Welfare Information Gateway

Juvenile Sex Offenders

<https://www.childwelfare.gov/topics/can/perpetrators/perp-sexabuse/juvenile/>

Juvenile Forensic Evaluation Resource Center

Sex Offender Forensic Programs

<http://www.ilppp.virginia.edu/OREM/SexOffenderPrograms>

National Center on Sexual Behavior of Youth

<http://www.ncsby.org/>

National Council of Juvenile and Family Court Judges

Juvenile Sex Offenders

<https://www.ncjfcj.org/our-work/juvenile-sex-offenders>

Office of Juvenile Justice and Delinquency Prevention (OJJDP)

Juvenile Sex Offender Research Bibliography

<https://www.ojjdp.gov/juvsexoff/sexbibtopic.html>

Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART)

<https://ojp.gov/smart/>

Society of Clinical Child and Adolescent Psychology

<https://sccap53.org/>

Virginia Department of Juvenile Justice (VDJJ)

<http://www.djj.virginia.gov/>



PROVIDER DESCRIPTIONS

MEDICAL AND PSYCHIATRIC SERVICES

Psychiatrist

Psychiatrists are medical doctors whose education includes a medical degree and at least four additional years of study and training. Psychiatrists are experts in the diagnosis and treatment of mental health disorders and in the use of psychotropic medication. Those who pass the national examination administered by the American Board of Psychiatry and Neurology become board certified in psychiatry. Psychiatrists provide medical/psychiatric evaluation and treatment for emotional and behavioral problems and psychiatric disorders. As physicians, psychiatrists can prescribe and monitor medications. **Child and adolescent psychiatrists** have two additional years of advanced training beyond general psychiatry in work with children, adolescents, and families. Regulated by the Virginia Board of Medicine.

Education/training: MD, as well as completion of a multi-year residency in psychiatry, usually in a hospital setting and under supervision of senior psychiatrists

Where found: Hospitals (regular and psychiatric), community services boards, private outpatient mental health clinics, and private practice

Discussed in this chapter:

Medical and Psychiatric Services

Psychiatrist
Pediatrician
Nurse Practitioner (NP)
Psychiatric Clinical Nurse Specialist

Psychological and Therapeutic Services

Psychologist
School Psychologist
Licensed Professional Counselor (LPC)
Licensed Marriage and Family Therapist (LMFT)
Licensed Clinical Social Worker (LCSW)
Licensed Social Worker

Specialized Therapeutic Services

Certified Sex Offender Treatment Provider (CSOTP)
Certified Substance Abuse Counselor (CSAC)
Certified Substance Abuse Treatment Practitioner
Certified Substance Abuse Counseling Assistant

Pediatrician

A primary care physician who focuses on the care of children from birth to 21 years of age and who specializes in preventive health maintenance for healthy children and medical care for those who are seriously or chronically ill. Pediatricians are also increasingly involved with the prevention, early detection, and management of behavioral, developmental, and functional social problems that affect children and adolescents. Regulated by the Virginia Board of Medicine.

Education/training: MD, as well as completion of a multi-year residency in pediatrics

Where found: Hospitals, public and private health clinics, and private practice

Nurse Practitioner (NP)

Nurse practitioners engage in the practice of medicine in collaboration and under the medical direction and supervision of a licensed physician. “Medical direction” means the collaborative development of a written protocol between the nurse practitioners and the physician. Nurse practitioners with prescriptive authority may prescribe medication within the scope of a written practice agreement in Virginia is regulated by the Board of Nursing and the Board of Medicine under a Committee of the Joint Boards. Nurse practitioners hold national certification in an area of specialty (family practice, psychiatry, pediatrics, etc.). In Virginia, most nurse practitioners work under the supervision of licensed physicians, but under certain conditions they may practice independently.

Education/training: RN; MA in nursing with nurse practitioner concentration; certification from a national board

Where found: Psychiatric hospitals, community services boards, private outpatient mental health clinics, and private practice

Psychiatric Clinical Nurse Specialist

These professionals are registered nurses who have a master’s degree in psychiatric mental health nursing and are licensed by the state to provide care, counseling, and therapy to persons with psychological, emotional and behavioral needs. An accreditation as an Advanced Practicing Registered Nurse (APRN) by an appropriate credentialing body is necessary for this provider to receive third party reimbursement. Regulated by the Virginia Board of Nursing.

Education/training: RN; MA in psychiatric/mental health nursing

Where found: Psychiatric hospitals, community services boards, private outpatient mental health clinics, and private practice

PSYCHOLOGICAL AND THERAPEUTIC SERVICES

Psychologist

A mental health professional with an advanced degree in psychology. **Clinical psychologists** can provide psychological evaluation and treatment for emotional and behavioral problems and disorders. They specialize in the practice of psychotherapy in individual, family, marital, and group settings. **Child psychologists** specialize in diagnosing and treating the psychological, cognitive, emotional, developmental, behavioral, and family problems of children and adolescents. Psychologists are unable to prescribe medications. Regulated by the Virginia Board of Psychology.

Education/training: PhD or PsyD

Where found: Psychiatric hospitals, residential treatment centers, community services boards, private outpatient mental health and substance abuse clinics, and private practice

School Psychologist

School psychologists are specifically licensed to provide psychological evaluation and treatment for emotional and behavioral problems and disorders in a school setting. Unlike clinical psychologists, they typically do not have a PhD. Regulated by the Virginia Board of Psychology.

Education/training: MA with an endorsement in psychology

Where found: Public and private schools, special education residential schools, special education day schools, and therapeutic day treatment centers

Licensed Professional Counselor (LPC)

These professionals are licensed to provide individual, group, family, and couples counseling. LPCs must obtain supervised clinical experience and must pass a state licensing exam. LPCs are regulated by federal and state laws, as well as their own code of ethics as developed by various national organizations such as the American Counseling Association. Not all counselors are LPCs. Regulated by the Virginia Board of Counseling.

Education/training: MA or MS; 3,400 hours of supervised residency in counseling practice, including 2000 hours of face-to-face contact with clients

Where found: Residential treatment centers, community services boards, private outpatient mental health, and substance abuse clinics

Licensed Marriage and Family Therapist (LMFT)

These professionals are licensed to provide therapy in the context of family and marital relationships. These professionals are trained in the assessment and treatment of cognitive, affective, or behavioral, mental and emotional disorders within the context of marriage and family systems through the application of therapeutic and family systems theories and techniques. Regulated by the Virginia Board of Counseling.

Provider Descriptions

Education/training: MA or MS; 3,400 hours of supervised residency in marriage and family therapy practice, including 2000 hours of face-to-face contact with clients

Where found: Community services boards, private outpatient mental health and substance abuse clinics, and private practices

Licensed Clinical Social Worker (LCSW)

These social workers are professionally qualified at the autonomous practice level to provide direct diagnostic, preventive, and treatment services that may include psychotherapy and counseling for mental disorders, substance abuse, marriage and family dysfunction, and problems caused by social and psychological stress or health impairment. Regulated by the Virginia Board of Social Work.

Education/training: MSW or DSW; supervised experience in a treatment setting

Where found: Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, and private outpatient mental health and substance abuse clinics

Licensed Social Worker

These professionals are trained to provide diagnostic, preventive, and treatment services, but on a supervised rather than independent basis. Regulated by the Virginia Board of Social Work.

Education/training: BA or MSW; supervised experience in a treatment setting

Where found: Local social service agencies, hospitals (both regular and psychiatric), residential treatment centers, group homes, community services boards, private outpatient mental health, and substance abuse clinics

SPECIALIZED THERAPEUTIC SERVICES

Certified Sex Offender Treatment Provider (CSOTP)

CSOTPs are mental health professionals from the disciplines of counseling, social work, psychology, nursing, or medicine who have received specialized training in sex offender evaluation and treatment. Regulated by the Virginia Board of Psychology.

Education/training: MA, PhD, PsyD, or MD; 50 hours of training in sex offender treatment; 2000 hours of post-degree clinical experience in assessment/treatment, with at least 200 hours with sex offender clients

Where found: Residential treatment centers, therapeutic group homes, community services boards, and private outpatient mental health clinics

Certified Substance Abuse Treatment Practitioner

These professionals are licensed to provide advanced substance abuse treatment and independent, direct, and unsupervised treatment to such individuals or groups of individuals, and to plan, evaluate, supervise, and direct substance abuse treatment provided by others. Regulated by the Virginia Board of Counseling.

Education/training: MA or MS; additional coursework and a supervised residency in substance abuse treatment

Where found: Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics

Certified Substance Abuse Counselor (CSAC)

These professionals are certified to perform substance abuse treatment functions, which generally include screening, intake, orientation, assessment, recovery, relapse prevention planning, substance abuse treatment, and case management. However, CSACs must practice under the supervision of a licensed substance abuse treatment practitioner or another licensed mental health professional unless they hold another license for independent practice or are working in an exempt setting. CSACs may also supervise certified substance abuse counseling assistants. Regulated by the Virginia Board of Counseling.

Education/training: BA; additional coursework and supervised experience in substance abuse treatment

Where found: Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics

Certified Substance Abuse Counseling Assistant

Professionals who are certified to perform the substance abuse treatment functions of orientation, implementation of substance abuse treatment plans, case management, substance abuse or dependence crisis intervention, record keeping, and consultation with other professionals. Certified substance abuse counseling assistants may participate in recovery group discussions but cannot engage in counseling with either individuals or groups or engage in independent or autonomous practice. They act under the supervision of a certified substance abuse counselor or other licensed mental health professional. Regulated by the Virginia Board of Counseling.

Education/training: High school diploma or equivalent; 300 hours of substance abuse treatment education and experience, including 180 hours of supervised substance abuse tasks with clients

Where found: Inpatient substance abuse treatment centers, community services boards, private outpatient mental health, and substance abuse clinics.



TERMS USED IN VIRGINIA'S MENTAL HEALTH DELIVERY SYSTEM

A list of *Commonly Used Acronyms and Abbreviations* appears at the end of this chapter.

504 Plan – An individualized plan developed for a student with a disability that specifies what accommodations and/or services they will get in school to “level the playing field” so that they may derive as much benefit from their public educational program as their nondisabled peers. The plan follows from the requirements of Section 504 of the Rehabilitation Act of 1973. Section 504 applies to all public entities receiving federal monies or federal financial assistance. Students with disabilities that qualify them for an **individualized education program** (IEP) under the **Individuals with Disabilities Act** (IDEA) cannot also have a 504 plan.

adjustment disorder – A disorder that occurs when a child experiences emotional and behavioral symptoms that are clearly in response to an identifiable stressor or stressors. See “*Adjustment Disorders*” section.

anecdotal evidence – An informal account of evidence, often in the form of hearsay. For instance, when a patient reports he or she feels better after taking a drug, this is anecdotal evidence that the drug is effective. Anecdotal evidence has less authority than scientific evidence and is not used to support **evidence-based** treatments or practices.

anticonvulsant – A drug designed to prevent the seizures or convulsions typical of epilepsy or other convulsant disorders. Anticonvulsant medicines are also used to treat **bipolar disorder** and other disorders.

anxiety disorders – Disorders characterized by worries or fears that cause significant impairment in the child’s functioning. When fears do not fade and begin to interfere with daily life and activities, an anxiety disorder may be present. See “*Anxiety Disorders*” section.

anorexia nervosa – An eating disorder characterized by low body weight (less than 85% of normal weight) distorted body image, and an intense fear of gaining weight. See “*Feeding and Eating Disorders*” section.

antidepressants – Medications used in the treatment of **depression**, as well as other psychiatric disorders. Includes **SSRIs**, **SNRIs**, and **tricyclic antidepressants**.

antipsychotics – Medications used to treat **psychotic** symptoms such as **hallucinations**, bizarre behavior, and **delusions**. There are two classes of antipsychotics. *Neuroleptics* (e.g., Haldol) are older (typical) antipsychotic medications. *Atypical antipsychotics* (e.g., Seroquel) are a newer class of antipsychotics that have fewer side effects and are sometimes used in an **off-label** capacity to treat nonpsychotic symptoms such as aggression.

Asperger’s syndrome – A type of **pervasive developmental disorder** (PDD) characterized by the presence of impairments in social interaction like those observed in autism, but without the significant delay in language or cognitive behavior. The diagnosis of Asperger’s syndrome was eliminated in 2013 and the disorder was

combined with other autism-related disorders under the umbrella term **autism spectrum disorder**. Research studies and clinicians may still use the term Asperger's syndrome. See "Autism Spectrum Disorder" section.

assessment – A professional review of a child's and family's needs conducted when they first seek services from a health care professional. It typically includes a review of physical and mental health, intelligence, school performance, family situation, **social history**, and behavior in the community.

assessment tool – A standardized and scientifically validated tool (such as a questionnaire) used to assist a health professional in diagnosing disorders during the assessment process. Many assessment tools require specific training in order to be conducted and scored correctly. Assessment tools usually have formal titles, such as the Eating Disorder Examination Questionnaire (EDE-Q).

attention-deficit/hyperactivity disorder (ADHD) – A **neurodevelopmental disorder**, usually first diagnosed in childhood, that is characterized by inattention, impulsivity and, in some cases, hyperactivity. See "Attention-Deficit/Hyperactivity Disorder" section.

atypical antipsychotics – see **antipsychotics**

autism spectrum disorder (ASD) – A complex **neurodevelopmental disorder** that is typically diagnosed during childhood. ASD is marked by two main characteristics: 1) persistent deficits in social communication and social interaction; and 2) restricted, repetitive behaviors, interests, and activities. Symptoms and characteristics of ASD are varied, both in scope and severity. See "Autism Spectrum Disorder" section.

behavior modification therapy – A form of **psychotherapy** in which a therapist analyzes a person's problematic behavior in terms of what reinforces or punishes that behavior. The behavioral therapist will systematically alter the reinforcers or punishers to help the person to change his or her behaviors. Behavior therapy has been adapted over the years into a type of therapy called **cognitive behavioral therapy** (CBT), which looks at the role of both thinking (cognition) and behavior in the context of human problems.

behavioral classroom management (BCM) – Teacher-implemented behavior modification strategies, including reward programs, point systems, and time-outs.

behavior intervention plan (BIP) – In educational settings, a formalized plan designed to address a student's problem behaviors by teaching and rewarding positive behaviors (if possible). BIPs are usually appended to a student's **individualized educational program**. A public school must attempt such a plan before changing a student's placement to a more restrictive environment (unless there is an emergency situation). A BIP should also detail the environmental or proactive changes the staff will make to decrease the likelihood of the undesirable behavior or symptom. BIPs should be preceded by a functional behavioral **assessment**.

behavioral health authorities (BHAs) – Agencies functioning in the same capacity and operating under the same requirements as **community services boards**.

behavioral parent training (BPT) – A technique for teaching management and discipline skills to parents so that treatment can continue in the home.

beta-blocker – a type of medication that inhibits the action of beta-adrenergic receptors, slowing cardiac and respiratory functions and constricting blood vessels. Beta-blockers are of value in the treatment of hypertension,

cardiac arrhythmias, and migraine. In psychiatry, they are used in the treatment of aggression and violence, anxiety-related tremors, [lithium](#)-induced tremors, [social phobias](#), [panic](#) states, and alcohol withdrawal.

binge eating disorder (BED) – A disorder resembling [bulimia nervosa](#) that is characterized by episodes of uncontrolled eating (or bingeing). It differs from bulimia, however, in that its sufferers do not purge their bodies of the excess food. See “*Feeding and Eating Disorders*” section.

bipolar disorder – A mood disorder causing a person’s moods to swing between states of [depression](#) (low mood and energy) and [mania](#) (heightened mood and energy). See “*Bipolar and Related Disorders*” section.

borderline personality disorder (BPD) – A pattern of behavior characterized by impulsive acts, intense but chaotic relationships with others, identity problems, and emotional instability.

bulimia nervosa (BN) – A pattern of behavior in which the individual eats excessive quantities of food and then purges the body by using laxatives, enemas, diuretics, vomiting, and/or exercising. See “*Feeding and Eating Disorders*” section.

case management – A service that assists children and their families in identifying and accessing services that meet their individual needs. The primary purpose of case management is to ensure that the needed services are delivered in an effective and efficient manner. The activities of a case manager may include identifying and reaching out to individuals in need of assistance, assessing needs and planning services, linking the individual to supports and services, coordinating services with other providers, monitoring service delivery, and advocating for these children in response to their changing needs. Case management services are typically provided by [community services boards](#), private clinics, and social services agencies. A **case manager** is a health care professional or social worker who works directly with clients, coordinates various activities, and acts as the clients’ primary contact with other members of the treatment team.

catatonia – A cluster of motor features that includes rigid posture, fixed staring, and stupor. Catatonia manifests in a variety of mental health disorders.

cerebral cortex – The outer layer of the brain. The cerebral cortex plays a key role in thought, planning, memory, attention, perceptual awareness, language, and consciousness. Also referred to as the cortex.

children’s advocacy center – A facility used in the investigation of child abuse cases and treatment of victims. A children’s advocacy center is a child-friendly and safe environment designed to be supportive of children who are victims of child abuse.

Children’s Services Act (CSA) – Formerly the Comprehensive Services Act, a Virginia law that created a collaborative system in which state and local agencies work together and draw on the same pool of funds to plan and provide services for at-risk youth. The purpose of the Act is to provide high quality, child-centered, family-focused, cost effective, community-based services to high-risk youth and their families. The two primary teams that operate under the CSA are [Family Assessment and Planning Teams](#) (FAPTs) and [Community Policy and Management Teams](#) (CPMTs).

clinical trials or studies – Research studies designed to test how well new medical approaches work and to answer scientific questions about better ways to prevent, screen for, diagnose, or treat a disease. They may also

compare a new treatment to a treatment that is already available. Every clinical trial has a protocol, or action plan; the plan describes the trial's goal and how it will be conducted. An independent committee of physicians, statisticians, and members of the community must approve and monitor the protocol and ensure that risks are worth the potential benefits. Most clinical trials are **double-blind studies**.

cognitive behavioral therapy (CBT) – A form of **psychotherapy** that helps people learn to change inappropriate or negative thought patterns and behaviors. The goal is to recognize negative thoughts or mind-sets (mental processes such as perceiving, remembering, reasoning, decision making, and problem solving) and replace them with positive thoughts or thoughts that better reflect reality, which can lead to more appropriate and beneficial behavior. For instance, cognitive behavioral therapy tries to replace thoughts that lead to low self-esteem (“I can’t do anything right”) with reality-based positive expectations (“I do many things right and can do this right, too”).

cognitive impairment – A term that describes poor mental function that affects the ability to think, concentrate, formulate ideas, reason, and remember.

community-based care – Care and support rendered outside the institutional setting. Treatment is provided where the child lives, goes to school, and plays.

community policy and management teams (CPMTs) – These are teams that operate under the **Children's Services Act** to coordinate agency efforts, manage available funds, and see that eligible youths and their families get the assistance they need. CPMTs coordinate long-range, community wide planning that ensures that resources and services needed by children and families are developed and maintained in communities. CPMTs establish policies governing referrals and reviews of children and families to the **family assessment and planning teams** (FAPTs). Each CPMT establishes and appoints one or more FAPTs based on the needs of the community. CPMTs also authorize and monitor the use of funds by each FAPT. The CPMT includes a representative from the following community agencies: **community services boards**, **Juvenile Court Services Unit**, Department of Health, Department of Social Services, and the local school division. The team also includes a parent representative and a private provider organization representative for children or family services, if such organizations are located within the locality.

community services boards (CSBs) – These agencies serve as the single point of entry into the publicly-funded mental health system. They provide comprehensive mental health, intellectual disability, and substance abuse services. There are 39 CSBs throughout Virginia. Because these agencies are affiliated with local governments, there is tremendous variation in the number and types of services offered by each. However, CSBs usually provide certain core services: **crisis intervention services**, local **inpatient services**, **outpatient services**, **case management**, day support, **residential services**, and **early intervention services**.

comorbidity – A condition in which an individual has a co-occurring disorder. In mental health, the term *dual diagnosis* is typically used if the co-occurring disorder is a substance-related disorder (e.g., opioid use disorder and **depression**) or a **neurodevelopmental disorder** (e.g., **ADHD** and **bipolar disorder**).

compulsions – In terms of children's mental health, a compulsion is a repetitive behavior (such as hand washing) or mental act (such as praying or counting) that a child is driven to complete. Compulsive acts are often used to reduce anxiety or distress, though there is no connection between the act and the distress. See **obsessions**.

conduct disorder (CD) – Children with CD exhibit persistent and critical patterns of misbehavior. These children may indulge in frequent temper-tantrums like children with **oppositional defiant disorder (ODD)**; however, they also violate the rights of others. See *“Disruptive, Impulse Control & Conduct Disorders”* section.

contingency management strategies – Strategies that use reward systems designed to provide reinforcements to increase desired behaviors, such as following directions or taking turns.

continuum of care – The delivery of healthcare provided over a period of time. Continuum of care typically describes the process of guiding the patient through various stages of care and tracking and managing needs and progress.

contraindicated – To indicate the inadvisability of a medical treatment.

co-occurring disorder – See **comorbidity**.

cortex – See **cerebral cortex**.

correlation vs. causal relationship – These terms are used in scientific research to describe the relationship between variables. When two variables have a causal relationship, research has shown that one variable causes the other. When two variables have a correlation, research has shown that they tend to occur together, but that one does not necessarily cause the other. For instance, research has proven that cigarette smoking causes lung cancer (causal relationship). Studies have also found a correlation between lung cancer and poverty. This does not mean that poverty itself causes lung cancer, only that those living in poverty are more likely to develop lung cancer.

cortisol – A hormone produced in the presence of stress.

court service units (CSU) – Local agencies operated by the Department of Juvenile Justice that serve as gatekeepers for children and families served by the local Juvenile and Domestic Relations Court. These units are responsible for handling petitions, intakes, investigations and reports, custody investigations, and probation supervision.

crisis intervention (emergency) services – 24-hour services that may be provided in either residential or nonresidential settings. These are short term interventions designed for children and adolescents who experience periodic crisis or **acute** episodes that require special services. The underlying goal of these services is to assist the child and family in resolving the situation so that **inpatient hospitalization** is unnecessary. Nonresidential crisis services include telephone hotlines, walk-in crisis intervention services, mobile crisis outreach services, and intensive **home-based interventions**. Residential services include runaway shelters, crisis stabilization units, and temporary placements in programs such as **therapeutic foster care** and crisis **group homes**.

cultural competence – A term that refers to improving the effectiveness of services through being sensitive and responsive to the cultural norms of the client. Culturally competent service providers are aware of the impact of their own culture and possess skills that help them to provide services that are culturally appropriate in terms of the values, customs, and beliefs of their client's culture. (A person can identify with a culture based on race, ethnicity, nationality, religion, sexual orientation, class, and so forth.)

cycling – A repeated, sequential event that can increase or subside. This term is often used in reference to mood swings. A patient who is experiencing rapid cycling has had at least four **manic**, **hypomanic**, or major **depressive bipolar** mood episodes in the previous 12 months. Full or partial remissions must occur for at least two months between episodes unless there is a change in polarity (i.e. from a manic to a major depressive episode). See “*Bipolar and Related Disorders*” section.

cyclothymic disorder – A mild form of **bipolar disorder** that causes emotional ups and downs.

daily report card – One strategy of **behavioral classroom management** that provides feedback to parents and/or the therapist about a child's progress in achieving target behaviors.

day treatment services – See **therapeutic day treatment**.

delusion – A fixed false belief that is resistant to reason or confrontation with actual fact. Delusions can be either bizarre (a belief that cannot possibly be true) or non-bizarre (a belief that could be true in other circumstances).

Department of Behavioral Health and Developmental Services (DBHDS) – DBHDS is the governmental entity in Virginia that administers services for individuals with mental illnesses, developmental disabilities, or addiction issues. Formerly the Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), the Department's name was changed by the 2008 Virginia General Assembly.

depression – Depression is characterized by extreme and lasting feelings of sadness, lack of self-worth, irritability, fatigue, and other emotional and physical symptoms. See “*Depressive Disorders*” section.

developmental disability – A disability that originated at birth or during childhood that is characterized by a disruption of normal development. When development of the brain or central nervous system is affected, these disabilities are referred to as **neurodevelopmental disorders**.

Diagnostic and Statistical Manual of Mental Disorders – Official manual listing psychiatric and psychological disorders, published by the American Psychiatric Association and recognized by both mental health professionals and the insurance industry as the primary authority for the diagnosis of mental disorders. The latest revision was the *DSM Fifth Edition (DSM-5) (2013)*, which replaced the *DSM Fourth Edition, Text Revision (DSM-IV-TR) (2000)*.

dialectical behavioral therapy (DBT) – A cognitive-behavioral treatment approach with two key characteristics: a behavioral, problem-solving focus blended with acceptance-based strategies, and an emphasis on dialectical processes. “Dialectical” refers to the issues involved in treating patients with multiple disorders and to the type of thought processes and behavioral styles used in the treatment strategies. DBT emphasizes balancing behavioral change, problem-solving, and emotional regulation with validation, mindfulness, and acceptance of patients.

disassociation – A mental process in which a person consciously or unconsciously detaches (or disassociates) his or her thought processes about an experience from the emotions those experiences provoke. Disassociation can be an unhealthy coping strategy for dealing with **traumatic experiences** and/or a symptom of a mental health disorder.

discharge plan – A document that summarizes information pertaining to a person's stay in a health care facility and identifies what needs to occur post-discharge.

disinhibition – A lack of restraint with impulsivity driven by current thoughts or feelings without regard to consequences. Unconscious disinhibition can be a symptom of a mental health disorder.

disruptive disorders – These disorders are the most common reasons children are referred for mental health evaluations and treatment. Disruptive disorders include mental health problems with a focus on behaviors that both identify emotional problems and create interpersonal and social problems for children and adolescents in the course of their development. **Conduct disorder** and **oppositional defiant disorder** are two classes of disruptive disorders. See *"Disruptive, Impulse Control & Conduct Disorders"* section.

disruptive mood dysregulation disorder – A new diagnosis to the **DSM-5**, this disorder applies to children up to age 18 who exhibit persistent irritability and frequent episodes of extreme inability to control their behavior.

dopamine – A **neurotransmitter** associated with attention, learning, and pleasure.

double-blind study – A scientific study in which neither the researchers nor the participants know details about the treatment received, including which participants received placebos. The goal of a double-blind study is to prevent bias or other factors to affect results.

DSM-5 – See *Diagnostic and Statistical Manual of Mental Disorders*.

dual diagnosis – See **comorbidity**.

dysthymia – See **persistent depressive disorder (dysthymia)**.

early intervention services – Services intended to improve functioning or change behavior in children identified as experiencing problems, symptoms, or behaviors. The goal is to improve the child's behaviors in order to prevent a future need for more extensive treatment. This approach also includes infant and toddler intervention, which provides family-centered, **community-based** early intervention services designed to meet the developmental needs of infants and toddlers and their families to enhance the child's development and to prevent or minimize the potential for developmental delays. These types of services are most often provided by social service agencies, **community services boards**, pediatricians and nurses in health clinics, and schools.

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) – Medicaid's comprehensive and preventive child health program for individuals under the age of 21. The EPSDT program covers screening and diagnostic services to determine physical or mental defects in recipients and health care, treatment, and other measures to correct or ameliorate any defects and chronic conditions discovered. Services include health and developmental history screening, immunization, nutritional status assessment, vision and hearing testing, dental services for children three years and older, and visual treatment including eyeglasses.

electroconvulsive therapy (ECT) – A treatment usually reserved for very severe or **psychotic depressions** or **manic** states that are not responsive to medication treatment. A low-voltage electric current is sent to the brain of an anesthetized patient to induce a convulsion or seizure, which has a therapeutic effect.

evidence-based – Treatments that have undergone scientific evaluation and are proven to be effective.

excoriation (skin-picking) disorder – A new **DSM-5** disorder characterized by recurrent skin picking resulting in skin lesions. See *“Obsessive-compulsive and Related Disorders”* section.

executive functioning – An umbrella term for the cognitive skills involved in mental control and self-regulation.

exposure therapy – A form of **psychotherapy** in which a patient is deliberately exposed, under controlled conditions, to the problem or event that triggers psychological problems with the aim of reducing the impact of the triggering event.

Family Access to Medical Insurance Security (FAMIS) – Virginia's Title XXI Plan that helps families provide health insurance to their children.

family assessment and planning teams (FAPTs) – Local teams that operate through the **Children's Services Act**. The purpose of the team is to assess the strengths and needs of troubled youths and families who are approved for referral to the team and identify and determine the services that are necessary to meet these unique needs. They are responsible for developing an individual family services plan (IFSP) for appropriate and cost-effective services, and for monitoring the child's progress under this plan.

family preservation services – See **home-based services**.

family support services – Services that are designed to assist families in dealing with the pressures and demands of raising children with severe emotional disturbance. A variety of services are provided to assist families in achieving balanced lives, including **respite care**; family **self-help**, support, and advocacy groups; and assistance with financial or family survival needs (food, housing, transportation, home maintenance). Family support services may also include providing caregivers with the necessary education, information, and referrals to ensure that they are informed decision-makers. These services are typically provided by social service agencies, **community services boards**, and private agencies and organizations.

family systems therapy – A form of **psychotherapy** that focuses on how a child interacts with his/her most important social environment, the family. The underlying premise of the therapy is that the child's problems are best understood by observing how they fit into the larger scheme of relationships among the members of the family group.

fetal alcohol syndrome – A condition affecting the children of mothers who consume large quantities of alcohol during pregnancy; it can involve **cognitive impairment** or delays, attention difficulties, and physical and emotional disability. Deficits range from mild to severe, including growth retardation, brain damage, **intellectual disability**, anomalies of the face, and heart failure.

Free Appropriate Public Education (FAPE) – A statutory requirement that children with disabilities receive a public education appropriate to their needs, at no cost to their families.

functional family therapy (FFT) – A family-based prevention and intervention program that combines and integrates established clinical therapy, empirically supported principles, and extensive clinical experience.

generalized anxiety disorder – A mental disorder characterized by chronic, excessive worry and fear that seems to have no real cause. Children or adolescents with generalized anxiety disorder often worry a lot about things

such as future events, past behaviors, social acceptance, family matters, their personal abilities, and/or school performance. See *"Anxiety Disorders" section*.

group homes – See [therapeutic group homes](#).

habit reversal therapy – Includes awareness training, competing response training and social support. See *"Motor Disorders" section*.

halfway houses – See [therapeutic group homes](#).

hallucinations – A strong perception of an event or object when no such situation is present; may occur in any of the senses (i.e., visual, auditory, gustatory, olfactory, or tactile).

hoarding disorder – The ongoing inability to discard or part with possessions, regardless of the value attributable by others. Hoarding may cause emotional, financial, legal, and physical harm to the affected individual as a result of the disorder. See *"Obsessive-compulsive and Related Disorders" section*.

home-based services (family preservation services) – Services typically provided in the residence of an individual who is at risk of being moved into an out-of-home placement or who is being transitioned back into the home from an out-of-home placement. The treatments are family-focused and involve working within the home environment to preserve the family structure. The services may include crisis treatment, intensive [case management](#), individual and family counseling, skill building (life, communication, and parenting), 24-hour emergency response, and assisting in obtaining and coordinating needed services, resources, and supports. Services vary based on the goals of the program and the needs of the family. The services tend to be of short duration (1 to 3 months) but highly intensive (5 to 20 hours per week). They are usually provided only when other interventions have proven unsuccessful. They are typically offered through child welfare agencies, [community services boards](#), mental health centers, hospitals, juvenile justice agencies, or [private providers](#).

independent living services – Programs specifically designed to help adolescents make the transition to living independently as adults. They provide training in daily living skills (financial, medical, housing, transportation) as well as vocational and job training. They are offered by [therapeutic group homes](#), [residential treatment centers](#), [day treatment programs](#), [community services boards](#), and private clinics.

individualized educational program (IEP) – A plan developed by parents, teachers, school administrators, and the student to meet the unique educational needs of a student with a disability covered under the Individuals with Disabilities Act (IDEA). The plan should describe the services that are to be provided by the school system within the context of the educational program and contain specific objectives and goals. Students with an IEP cannot also have a [504 Plan](#).

Individuals with Disabilities Act (IDEA) – Federal law mandating that a free and appropriate public education be available to all school-age children with certain disabilities. Students covered under IDEA must develop an individualized educational program (IEP) to receive services. Also known as Public Law 105-17.

inpatient hospitalization – Services provided on a 24-hour basis in a hospital setting. Tends to be reserved for children with difficult and ongoing problems. Inpatient hospitalization programs use a variety of interventions, including individual, group, and family therapy, medication management, and [behavior modification](#).

intellectual disability – Previously termed *mental retardation*, intellectual disability is characterized both by a significantly below-average score on a test of mental ability or intelligence and by limitations in the ability to function in areas of daily life, such as communication, self-care, and getting along in social situations and school activities. See “*Intellectual Disability*” section.

intensive outpatient therapy (IOP) – A form of **partial hospitalization** that is more intense than regular once-per-week outpatient therapy and less intense than full **inpatient hospitalization**. Patients often participate in therapy several days per week for several hours at a time. This type of treatment is typically shorter in duration than most partial hospitalization programs.

intermediate care facility – An institution that provides health-related care and services to individuals who do not require the degree of care provided by hospitals or skilled nursing facilities as defined under Title XIX (**Medicaid**) of the Social Security Act.

intermediate care facilities for persons with mental retardation (ICF/MR) – Facilities providing a community-based residential setting for individuals with **intellectual disability** who also have severe medical needs. They offer rehabilitative services designed to maximize independence and enhance the resident's quality of life. They provide residential care, skilled nursing, and specialized training, and may include training programs in language, self-care, independent living, socialization, academic skills, and motor development. While ICF/MRs most often serve adults, adolescents can sometimes be placed in these programs.

interpersonal therapy – A form of **psychotherapy** that focuses on improving interpersonal skills by exploring the relationships that the patient has with others. Patients learn to evaluate their interactions with others and to become aware of self-isolation and social difficulties.

juvenile correctional center (JCC) – A secure residential facility operated by the Virginia Department of Juvenile Justice. Juvenile offenders are committed to the JCC by the Juvenile and Domestic Relations District Courts and Circuit Courts for rehabilitation and confinement. This facility provides programs to address the treatment, disciplinary, medical, and recreational needs of the juveniles.

juvenile sex offender – Juvenile perpetrating sex offense(s) by committing any sexual act against the victims' will, without consent, or in an aggressive, exploitive, or threatening manner. See “*Sexual Offending*” section.

lithium – A type of mood stabilizing medication.

major depressive disorder – A disorder characterized by one or more major episodes of **depression** without a history of **mania**. See “*Depressive Disorders*” section.

mandated – In terms of children's mental health, required by law. This designation can refer to children receiving funding under the **Children's Services Act**. State and local governments are required by law to appropriate sufficient funds for services for these youth. Children and adolescents who fall within this category are generally those who receive individualized services from the education and foster care systems.

mania – A distinct period of abnormally and persistently elevated, expansive, or irritable mood. See “*Bipolar and Related Disorders*” section.

massed negative practice – One of the most frequently used **behavioral therapy** techniques in the treatment of children with **tic disorder** in which the individual is asked to deliberately perform the tic movement for specified periods of time interspersed with brief periods of rest.

Medicaid – The federal program (Title XIX of the Social Security Act) that pays for health services for certain categories of people who are poor, elderly, blind, disabled, pregnant, or caretaker relatives of children under the age of 18 and who meet financial eligibility criteria.

Medicaid Waiver Program – In Virginia, individuals with disabilities may be eligible to receive services via Medicaid Home and Community-Based (HCBS) waivers. Medicaid HCBS waivers provide opportunities for individuals eligible for an institutional level of care to receive services in their own home or community rather than an institutional setting. Eligible individuals are screened for the waiver by their local community services board. If the child is found eligible for the waiver, the parent would “waive” the child’s right to receive services in an institution and choose instead to receive services in the community. More information about Virginia’s Medicaid waivers can be found on the Virginia Department of Behavioral Health and Development Services (DBHDS) website.

Medicare – The federal health insurance program for people who are 65 or older.

mental retardation – See **intellectual disability**.

mood stabilizer – Medication used in the treatment of **bipolar disorder** to suppress swings between **mania** and **depression**. Lithium is a commonly-used mood stabilizer.

multidimensional family therapy (MDFT) – An outpatient, family-based treatment for teenagers with serious substance abuse issues. This approach views drug use in terms of network of influences (individual, family, peer, community) and encourages treatment across settings in multiple ways. Sessions may be held in a clinic, home, court, school, or other community locations. See “*Substance Use Disorders*” section.

multisystemic therapy (MST) – An integrative, family-based treatment with focus on improving psychosocial functioning for youth and families so that the need for out-of-home placements is reduced or eliminated.

neurodevelopmental disorders – A group of disorders in which the development of the brain or central nervous system has been disturbed in early development. This disruption causes impairment in physical, learning, language, or behavior areas; may impact day-to-day functioning; and can cause **developmental disabilities** that can last throughout a person’s lifetime.

neurofeedback – A type of biofeedback. Neurofeedback involves learning to consciously control mental and physical functions that are usually thought to be involuntary, such as symptoms of a mental disorder. The procedure uses electronic equipment to monitor brain activity and convert the measurement into a signal that a person can easily perceive, usually via a computer monitor. The person can then attempt to use conscious control to alter the signal.

neuroleptics – See **antipsychotics**.

neuropsychiatry – A branch of medicine that deals with mental disorders attributed to diseases or disorders of the brain and nervous system, including **neurodevelopmental disorders**.

neurotransmitters – In the brain, these chemicals transfer messages from one nerve cell to another and affect mood.

non-mandated – In children's mental health services, not required by law. This designation is given to youths who are referred for services under the [Children's Services Act](#) for which the Commonwealth is not required to provide complete funding. Children and adolescents who fall into this category are generally referred for treatment by the juvenile justice or mental health systems.

norepinephrine – A [neurotransmitter](#) that regulates blood pressure by causing blood vessels to narrow and the heart to beat faster.

obsessions – Unwanted ongoing urges or thoughts that cause anxiety and stress. Some individuals try to ignore or suppress obsessions by completing other thoughts or actions, which can become [compulsions](#).

obsessive-compulsive disorder (OCD) – A disorder in which a person has an unreasonable thought, fear, or worry that he/she tries to manage through a ritualized activity to reduce the anxiety. Frequently occurring disturbing thoughts or images are called [obsessions](#), and the rituals performed to try to prevent or dispel them are called [compulsions](#). See *"Obsessive-Compulsive and Related Disorders"* section.

off-label use – The legal practice of prescribing a medication in a way that was not originally intended by the manufacturer.

Office of Juvenile Justice and Delinquency Prevention (OJJDP) – A federal agency within the U.S. Department of Justice that coordinates and provides resources to state and communities pertaining to juvenile justice system.

oppositional defiant disorder (ODD) – An enduring pattern in children of uncooperative, defiant and hostile behavior to authority figures that does not involve major antisocial violations. See *"Disruptive, Impulse-Control, and Conduct Disorders"* section.

outpatient psychiatric services – Services provided to individuals, groups, or families on an hourly schedule. Outpatient services are the most frequently used treatment method for children, and may either be provided for a short term (6 to 12 sessions) or a longer duration (a year or longer). Services are generally provided on a weekly basis, if not more often, depending on the individual needs of the child and family. However, under managed care and most insurance plans, brief therapy is likely to be mandated. It is the least restrictive form of service for children and families, and it is provided in a number of settings, including [community services boards](#), outpatient psychiatry departments of hospitals, and private offices. It is most often provided by psychiatrists, psychologists, social workers, and counselors. Treatment efforts may include diagnosis and evaluation, intake and screening, counseling, [psychotherapy](#), [behavior management](#), psychological testing and [assessment](#), and medication management.

panic attack – A distinct period of unexpected terror. Symptoms like shortness of breath, pounding heart, and fear of losing control may accompany the attack, which may be expected or a surprise. Panic attacks are sometimes mistaken for heart attacks or other health problems by the person experiencing the attack. **Panic disorder** is characterized by recurrent, unexpected panic attacks. Panic disorder is separate from [agoraphobia](#) in the [DSM-5](#).

partial hospitalization – A form of **therapeutic day treatment** that is based in a psychiatric hospital. It provides the use of a psychiatric hospital setting during the day, with children returning to their home each night. It is frequently used for those children who are being released from a psychiatric hospital and must transition back into the community and the school system. It is also used to assist youths at risk of **inpatient hospitalization**.

pathological – Related to or caused by a mental health disorder or disease.

persistent depressive disorder (dysthymia) – A form of chronic **depression**, in which an individual has a persistent depressed mood for more days than not for at least one year, when symptom-free intervals last no longer than two consecutive months. Symptoms of persistent depressive disorder typically are not as severe as those relating to **major depressive disorder**. See “*Depressive Disorders*” section.

pervasive developmental disorders (PDD) – These disorders can usually be identified in the early years of a child’s life. Children with PDD have difficulty in areas of development or use of functional skills such as language, communication, socialization, and motor behaviors. In May 2013, the **DSM-5** recategorized pervasive developmental disorders under the umbrella term **autism spectrum disorder**. Research studies and clinicians may still use the term pervasive developmental disorder. See “*Autism Spectrum Disorder*” section.

pharmacotherapy – In mental health, an intervention that involves prescribing **psychotropic medications**.

phobia – An uncontrollable, irrational, and persistent fear of a specific object, situation, or activity. Fear and anxiety related to a phobia is out of proportion with any actual danger related to the object or situation. Also called *specific phobia*. See “*Anxiety Disorders*” section.

placebo – A pharmacologically inert substance (such as saline solution or a “sugar pill”) that replaces a pharmacologically active substance. People can experience a reduction of symptoms or a measurable improvement in health after taking a placebo. This phenomenon is referred to as the placebo effect. Placebos are usually used as part of a **clinical trial** or double-blind study to help measure if a particular drug outperforms the placebo.

plan of care – A treatment plan that identifies the child and family’s strengths and needs, establishes goals, details appropriate treatment and services.

positive behavior support – Re-directive therapy used in the home or school environment that has the goal of helping the youth strengthen communication, social, and self-management skills.

post-traumatic stress disorder (PTSD) – A debilitating condition that often follows a **traumatic** physical or emotional event causing the person who survived the event to have persistent, frightening thoughts and memories, or flashbacks, of the ordeal. See “*Trauma- and Stressor-Related Disorders*” section.

premonitory urge – A term commonly used to describe early, minor symptoms that precede a major health problem.

premorbid – Preceding the occurrence of disease.

prognosis – The expected outcome or course of a disease, which includes the patient’s chance of recovery.

protective factor – See [risk and protective factors](#).

prevention services – Services that promote families, communities, and systems working together to reduce the incidence of mental illness and substance abuse disorders and improve the quality of life for those who experience [intellectual](#) or other [neurodevelopmental disabilities](#). Emphasis is on the enhancement of [protective factors and reduction of risk factors](#). Activities may include information dissemination, prevention education, and problem identification and referral. Services are most often provided by social service agencies, [community services boards](#), pediatricians and nurses in health clinics, and schools.

private inpatient units – Privately-owned hospitals that offer inpatient psychiatric and/or substance abuse services to individuals with severe, [acute](#) disturbances. They are licensed as hospitals under state regulations.

private residential units – Privately-owned [residential facilities](#) that provide intensive treatment services to children and adolescents with emotional or mental disorders. They are somewhat less restrictive than [private inpatient units](#), but still tend to be highly structured and secure, and should be reserved for children and adolescents in crisis. However, the level of security and restrictiveness tend to vary across facilities.

psychological evaluation – A clinical examination conducted by a mental health professional that is used to determine the nature of a child's psychological difficulties. It often includes an analysis of components of the child's life such as his/her development, behavior, education, medical history, and family and social relationships. An evaluation usually requires several hours to complete and is often best performed over several sessions, including sessions for the child and parents separately and together. In addition, a full evaluation usually requires the collection of information from a variety of outside sources, such as the school, child's pediatrician, psychological testing, and social service agencies. Psychological evaluations are typically more involved than mental health [assessments](#).

psychosis – A disruption of thinking that impairs an individual's perception of reality. Psychosis is frequently associated with the diagnosis of [schizophrenia](#).

psychotic – A person experiencing psychosis, or a break with reality. Although a person who is psychotic may also be agitated or aggressive, the term does not imply that the affected person is violent.

psychosocial treatments – Services that focus on the relationship between psychological, environmental, and social factors. They include certain forms of [psychotherapy](#), as well as social and vocational training, and they are intended to provide support, education, and guidance to people with mental illnesses and their families. A psychiatrist, psychologist, social worker, or counselor typically provides psychosocial treatments.

psychostimulant – See [stimulant](#).

psychotherapy – An intervention that involves regularly scheduled sessions between a patient and a mental health professional, such as a psychiatrist, psychologist, psychiatric social worker, or psychiatric nurse. The goal of this treatment is to help patients understand why they are acting and thinking in ways that are troubling or dangerous to themselves or others so they have more control over their behaviors and can correct them. It is commonly used in the treatment of children and youth with emotional and behavioral problems, either in conjunction with or in place of prescribed medications. This kind of therapy has many forms, including psychodynamic, [behavioral](#), [cognitive-behavioral](#), [interpersonal](#), [supportive](#), and [family systemic](#).

psychotropic medications – Prescribed drugs that affect an individual's mental state. Psychotropic drugs are prescribed to reduce the symptoms of biologically based psychological disorders.

purging – A destructive pattern of ridding the body of excess calories (to control weight) by vomiting, abusing laxatives or diuretics, taking enemas, and/or exercising obsessively. Occurs most frequently in individuals suffering from **bulimia nervosa**. See “Feeding and Eating Disorders” section.

pyromania – A rare disorder characterized by an irresistible impulse to start fires. See “Disruptive, Impulse Control & Conduct Disorders” section.

randomized trial – A type of **clinical trial** in which the participants are assigned randomly (by chance alone) to different treatments.

reactive attachment disorder – A disorder characterized by serious problems in emotional attachments to others that usually presents by age five and that can be caused by **trauma** and/or neglect. See “Trauma- and Stressor-Related Disorders” section.

residential services – Services that provide overnight care in conjunction with intensive treatment or training programs. They are typically provided in psychiatric hospitals, residential treatment centers (RTCs), and **therapeutic foster homes**.

residential treatment center (RTC) – 24-hour facilities providing short-term intermediate care, crisis stabilization, and intensive mental health treatment programs. They are not licensed as hospitals and serve as an alternative to **inpatient psychiatric hospitalization**. The settings vary, with some highly structured like psychiatric hospitals, while others are similar to **group homes** or halfway houses. They also vary in the range of services they offer, as some offer a full range of treatment services while others are more limited or specialized. While these facilities were originally designed to serve as long-stay institutions, under managed care they are serving youth for periods as brief as one month, serving only as a source for intensive evaluation and stabilization.

respite care – A type of **family support service**. Parents are given relief from childcare by either placing the child with another family or bringing a caretaker into the home for a few days. This service is usually provided on a planned basis under circumstances in which either there has been a prolonged crisis in which the child has exhausted the family resources, or there has been another family crisis, such as illness or death of another family member. This service may be provided by **community services boards**, social service agencies, or private clinics.

risk and protective factors – Factors that either increase or decrease an individual's likelihood of developing a disorder or disease. Risk and protective factors are determined through population studies. Exposure to risk or protective factors does not mean that any one individual will definitely contract or avoid contracting a particular disorder or disease.

satiation – The practice of repetitively lighting and extinguishing fire. See “Juvenile Firesetting” section.

schizoaffective disorder – A mental health disorder characterized by recurring, alternating episodes of elevated or depressed moods with distorted perceptions.

schizophrenia – A severe, chronic, and disabling disturbance of the brain that causes faulty perception, inappropriate actions and feelings, withdrawal from reality and personal relationships into fantasy and delusion, and a sense of mental fragmentation. *See “Schizophrenia” section.*

screening tool – A brief **assessment tool**, such as a questionnaire, used to identify symptoms of a disorder or other problem. Screening tools are often used to determine if formal assessment is indicated.

secure treatment service – Provision of services for people with mental disorders or serious mental health problems who, based on clinical **assessment**, require treatment in a closed setting to ensure the safety of the person, the staff, and the community. Three levels of treatment are provided: acute inpatient secure treatment, extended secure treatment, and high security treatment.

selective serotonin reuptake inhibitors (SSRIs) – A class of drugs commonly prescribed for treating **depression**. SSRIs work by stopping brain receptor cells from absorbing **serotonin**, an action that allows more of this **neurotransmitter** to be available to be taken up by other cells. SSRIs can improve mood.

self-harm or self-injury – Also known as deliberate self harm, self-inflicted violence, self-injurious behavior, or self-mutilation, self-harm is a deliberate, intentional injury to one's own body that causes tissue damage or leaves marks for more than a few minutes. Self-harm is often done to cope with an overwhelming or distressing situation. *See “Nonsuicidal Self Injury” section.*

separation anxiety disorder (SAD) – Excessive worry and fear about being apart from family members or individuals to whom a child is most attached. Children with separation anxiety disorder fear being lost from their family or fear something bad happening to a family member if they separated from them. *See “Anxiety Disorders” section.*

serious emotional disturbance (SED) – SED in children ages birth through 17 is defined as a serious mental health disorder that can be diagnosed using **DSM-5** criteria. Many of these disorders are discussed in the *Collection*.

serotonin – A **neurotransmitter** that is thought to affect mood and social behavior, appetite and digestion, sleep, memory, and sexual desire and function.

serotonin and norepinephrine reuptake inhibitors (SNRIs) – A class of drugs commonly prescribed for treating **depression**. SNRIs work by stopping brain receptor cells from absorbing both **serotonin** and **norepinephrine**, an action that allows more of these **neurotransmitters** to be available to be taken up by other cells and affects mood.

social anxiety disorder (social phobia) – Persistent fear or **phobia** of social situations that involve interacting with other people; fear of being negatively judged and evaluated by others in social situations. Formerly termed *social phobia* in the *DSM-IV*. *See “Anxiety Disorders” section.*

somatization – The process of experiencing mental and emotional stress in a way that manifests as physical symptoms (such as stomach aches or headaches).

special education – Specially designed instruction that adapts, as appropriate, to the needs of a disabled child. Such education must ensure access for the child to the general curriculum, so that he or she can meet the

educational standards that apply to all children. This education is to be provided at no cost to the parents and is implemented under the guidelines of the **Individuals with Disabilities Act** (IDEA), which requires school to identify children with disabilities in need of special education.

special education day schools – A form of **therapeutic day treatment**. These are schools that are specially designed to meet the needs of children with severe behavior disorders who are unable to function at an age-appropriate level in the regular school system. The programs allow for collaboration between teachers and mental health professionals, and provide low student-teacher ratios and additional family services with the ultimate goal of returning the child to the regular school setting.

spectrum – A condition that is not limited to a specific set of values, but that can vary within a continuum.

standards of learning (SOLs) – The outline of the basic knowledge and skills that Virginia children will be taught in grades K-12 in the academic subjects of English, math, science, and social studies.

state mental health facilities – State-run facilities providing a range of psychiatric, psychological, rehabilitative, nursing, support, and other necessary services for children and adolescents with significant and **acute** psychiatric concerns. One facility in the Commonwealth is designated for children and adolescents: the Commonwealth Center for the Treatment of Children and Adolescents.

substance abuse medical detoxification – A form of **inpatient services** in which doctors and other medical personnel use medication to eliminate or reduce effects of alcohol or other drugs in the patient's body. These services are available in local hospitals or other emergency care facilities.

suicidal ideation – Persistent thoughts of suicide or wanting to take one's life. *See "Youth Suicide" section.*

system of care – A method of delivering mental health services that helps children and adolescents with mental health problems and their families get the full range of services in or near their homes and communities. These services must be tailored to each individual child's physical, emotional, social, and educational needs. In systems of care, local organizations work in teams to provide these services.

tardive dyskinesia – An involuntary movement disorder caused by the long-term use of **antipsychotic** drugs.

Temporary Assistance for Needy Families (TANF) – A block grant program designed to make welfare recipients self-sufficient and turning welfare into a program of temporary assistance. TANF replaced the national welfare program known as Aid to Families with Dependent Children (AFDC) and the related programs known as the Job Opportunities and Basic Skills Training (JOBS) program and the Emergency Assistance (EA) program. TANF recipients are usually eligible for full Medicaid benefits and include children younger than 18 (or expected to graduate from high school by age 19). One of the child's parents must be dead, absent, disabled, or unemployed. Administered by the VA Department of Social Services and the local DSS.

therapeutic day treatment – An outpatient treatment program that serves children with diagnoses that range from severe emotional disturbance to developmental delay. These services provide an integrated set of psychoeducational activities, counseling, and family treatments that involve the young person for several hours each day. Services typically include **special education**, individual and group counseling, family counseling and training, **crisis intervention**, skill building, **behavior modification**, and recreational therapy. However, the nature

of these programs may vary widely due to factors such as setting, the population being served, the intensity of treatment, the theoretical approach, and the treatment components. The integration of this broad range of services is designed to strengthen both individual and family functioning and to prevent a more restrictive placement of the child. The child is able to receive the benefits of a structured setting while being able to return home at night and continue involvement with family and peers. These services may be offered in regular school settings, [special education day schools](#), [community services boards](#), and hospitals. Currently, Medicaid is the only third party source that routinely covers this service.

therapeutic foster care – The least restrictive form of [residential treatment](#), placing children in private homes with specially trained foster parents. It is typically provided to children and adolescents with emotional or behavioral disturbances. The intent of these programs is to provide treatment within a family context. Children are placed with foster parents who have been carefully selected to work with children with special needs. These parents receive education and training to assist in working effectively with the child, including topics such as active listening, behavioral management and programming, and age-appropriate behavioral expectations. During these placements, efforts are made to provide the biological family with counseling, support, and other types of assistance so that the child can be returned to the home as quickly as possible. Programs tend to differ in approach, structure, intensity, and type of training. Most serve youth from birth to 18 years, with most youth entering during early adolescence.

therapeutic group homes – Facilities that provide emotionally and behaviorally disturbed adolescents with an environment to learn social and psychological skills. These homes are located in the community, and residents attend the local schools. In Virginia, a group home is defined as a community-based, home-like single dwelling, or its acceptable equivalent, other than the private home of the operator, and serves up to 12 residents. An array of services is provided, such as individual [psychotherapy](#), group therapy, and/or [behavior modification](#). Vocational training and work experiences are typically included as part of the treatment program for adolescents. The amount of structure incorporated into the program varies based on the level of need of the youths served.

tic – A tic is an involuntary, sudden, rapid, recurrent, nonrhythmic motor movement or vocalization. *See “Motor Disorders” section.*

tic disorder – A type of motor disorder that may be classified as a vocal tic, a motor tic, a simple tic or a complex tic. *See “Motor Disorders” section.*

Title IV-E – The Federal Social Security Act authorizing financial assistance for foster children and for families receiving adoption assistance.

Title V – Title V of the Social Security Act, which became the Maternal and Child Health Services Block Grant in 1981.

Title XVIII – Social Security Act Pertaining to Medicare.

Title XIX – Medicaid. A federally aided, state-operated and administered program that provides medical benefits for certain indigent or low-income persons in need of health and medical care. Authorized by Title XIX of the Social Security Act.

Title XXI – The State Children's Health Insurance Program (SCHIP), part of the Social Security Act, that authorizes states to provide health insurance coverage to uninsured children up to 200% of the federal poverty level (FPL). States may provide this coverage by expanding Medicaid or by expanding or creating a state children's health insurance program. **FAMIS** is Virginia's SCHIP program.

Tourette disorder – A disorder characterized by multiple motor **tics** and at least one vocal tic. See *"Motor Disorders"* section.

transitional services – Services that help children leave the system that provides help for children and move into adulthood and the adult service system. Help includes mental health care, **independent living services**, supported housing, vocational services, and a range of other support services.

trauma – Any injury, physical or emotional. A traumatic event is an occurrence that threatens injury, death, or the physical body or that otherwise causes emotional harm to an individual. Traumatic events often cause feelings of shock, terror, or helplessness. Complex trauma refers to multiple traumatic events experienced by a child that occur within the caregiving system, where safety and stability would be expected. Trauma can cause **post-traumatic stress disorder**. See *"Trauma- and Stressor-Related Disorders"* section.

trauma informed care – Theory of care in which providers understand that trauma impacts children in a variety of ways, recognize those signs in children and their families, and treat both the trauma and resulting symptoms in a way that prevents additional trauma.

trichotillomania (hair-pulling disorder) – A disorder wherein an individual pulls hairs from the body as a response to a stressor. See *"Obsessive-Compulsive and Related Disorders"* section.

tricyclic antidepressants (TCA) – An older class of drugs used in the treatment of clinical **depression** and other disorders. Tricyclic refers to the presence of three rings in the chemical structure of these drugs.

Virginia Independence Program (VIP) – Virginia's welfare reform program.

Virginia Initiative for Education and Work (VIEW) – Work component of the **Temporary Assistance for Needy Families** (TANF) program. Name was changed from "Virginia Initiative for Employment not Welfare" as of July 1, 2019.

waiver – See **Medicaid Waiver Program**.

wraparound services – Child- and family-driven services and supports that are **community-based**. They address the child's needs in the home, school, and community, and are developed through collaboration between the child, family, and all of the service providers who provide support to the child. The underlying purpose is to provide services that follow the child as he/she interacts in different environments in the community. The organizations involved in collaboration can include mental health, education, juvenile justice, and child welfare. **Case management** is usually necessary to coordinate services.

COMMONLY USED ACRONYMS AND ABBREVIATIONS

| | |
|-----------|--|
| AAA | Area Agency on Aging |
| AACAP | American Academy of Child & Adolescent Psychiatry |
| AAIDD | American Association on Intellectual and Developmental Disabilities |
| AAP | American Academy of Pediatrics |
| ABA | Applied Behavior Analysis |
| ACT | Assertive Community Treatment |
| ADA | American Dietetic Association or Americans with Disabilities Act |
| ADDM | Autism and Developmental Disabilities Monitoring |
| ADHD | Attention-Deficit/Hyperactivity Disorder |
| AFDC | Aid to Families with Dependent Children |
| ALF | Assisted Living Facility |
| ALOS | Average Length of Stay |
| AN | Anorexia Nervosa |
| ANRED | Anorexia Nervosa and Related Eating Disorders |
| APA | American Psychiatric Association or American Psychological Association |
| Arc (The) | formerly the Association for Retarded Citizens |
| ART | Aggression Replacement Therapy |
| AS | Asperger's Disorder |
| ASAS | Australian Scale for Asperger's Syndrome |
| ASD | Autism Spectrum Disorder |
| ASFA | Adoption and Safe Families Act of 1997 |
| ASQ | Ages and Stages Questionnaire |
| AZT | Azidothymidine |
| BCM | Behavioral Classroom Management |
| BED | Binge Eating Disorder |
| BES | Binge Eating Scale |
| BH-MCO | Behavioral Health Managed Care Organization |
| BHA | Behavioral Health Authority |
| BHO | Behavioral Health Organization |
| BHRS | Behavioral Health Rehabilitative Services |
| BIP | Behavior Intervention Plan |
| BMI | Body Mass Index |
| BN | Bulimia Nervosa |
| BPD | Borderline Personality Disorder or Bipolar Disorder |
| BPD-NOS | Bipolar Disorder Not Otherwise Specified |
| BPI | Behavioral Peer Intervention |
| BPT | Behavioral Parent Training |
| BT | Behavioral Therapy |
| BULIT- R | Bulimia Test-Revised |

| | |
|---------|--|
| CAPS-CA | Clinician-Administered PTSD Scale for Children and Adolescents |
| CASA | Court Appointed Special Advocate |
| CBC | Community-based Care |
| CBT | Cognitive Behavioral Therapy |
| CD | Conduct Disorder |
| CDC | Centers for Disease Control and Prevention |
| CDIs | Child Development Inventories |
| CFI | Children's Firesetting Inventory |
| CHADD | Children and Adults with Attention Deficit Disorders |
| CHAT | Checklist for Autism in Toddlers |
| CHINS | Child in Need of Services |
| CHINSup | Child in Need of Supervision |
| CMHC | Community Mental Health Center |
| CMS | Centers for Medicare and Medicaid Services |
| COBRA | Consolidated Omnibus Budget Reconciliation Act |
| COLA | Cost of Living Adjustment |
| COS | Childhood-onset Schizophrenia |
| COY | Virginia Commission on Youth |
| CPMT | Community Policy and Management Team (Virginia) |
| CPS | Child Protective Services |
| CSA | Children's Services Act for At Risk Youth and Families (Virginia) |
| CSAC | Certified Substance Abuse Counselor |
| CSB | Community Services Board (Virginia) |
| CSU | Court Service Units |
| CSOTP | Certified Sex Offender Treatment Provider |
| CT | Computer Tomography |
| DARE | Drug Abuse Resistance Education |
| DARS | Virginia Department of Aging and Rehabilitative Services |
| DBD | Disruptive Behavioral Disorder |
| DBD-NOS | Disruptive Behavioral Disorder Not Otherwise Specified |
| DBHDS | Virginia Department of Behavioral Health and Developmental Services (formerly DMHMRSAS) |
| DBT | Dialectical Behavioral Therapy |
| DCE | Virginia Department of Correctional Education |
| DCJS | Virginia Department of Criminal Justice Services |
| DCSE | Virginia Child Support Enforcement |
| DD | Developmental Disability or Dually Diagnosed |
| DHP | Virginia Department of Health Professions |
| DJJ | Virginia Department of Juvenile Justice |
| DMAS | Virginia Department of Medical Assistance Services |
| DMG | Dimethylglycine |
| DOC | Virginia Department of Corrections |
| DOE | Virginia Department of Education |

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| DRC | Daily Report Card |
| DSH | Deliberate Self-harm |
| DSM-IV-TR | <i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision</i> |
| DSM-5 | <i>Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition</i> |
| DSS | Virginia Department of Social Services |
| DTT | Discrete Trial Teaching |
| DUI | Driving Under the Influence |
| EA | Emergency Assistance |
| EAP | Employee Assistance Program |
| EAT | Eating Attitudes Test |
| ECT | Electroconvulsive Therapy |
| ED | Emotional Disturbance or Eating Disorder |
| EDDS | Eating Disorder Diagnostic Scale |
| EDE | Eating Disorder Examination |
| EDED-Q | Eating Disorder Examination Questionnaire |
| EDI-3 | Eating Disorder Inventory - Revised |
| EDNOS | Eating Disorders Not Otherwise Specified |
| EEG | Electroencephalogram |
| EI | Eating Inventory |
| EOS | Early-onset Schizophrenia |
| EPSDT | Early and Periodic Screening, Diagnosis, and Treatment |
| ERP | Exposure and Response Prevention |
| ESL | English as a Second Language |
| FAMIS | Family Access and Medical Insurance Security Plan, Virginia's Title XXI Plan |
| FAMIS CPU | Application-processing unit for FAMIS (Virginia) |
| FAPE | Free Appropriate Public Education |
| FAPT | Family Assessment and Planning Team |
| FAS | Fetal Alcohol Syndrome |
| FBI | Federal Bureau of Investigation |
| FC | Foster Care |
| FCT | Family Centered Treatment |
| FDA | Food and Drug Administration |
| FEMA | Federal Emergency Management Agency |
| FFT | Functional Family Therapy |
| FIA-C | Fire Incident Analysis for Children |
| FIA-P | Fire Incident Analysis for Parents |
| FPL | Federal Poverty Level |
| FRI | Firesetting Risk Inventory |
| GAD | Generalized Anxiety Disorder |
| HRT | Habit Reversal Therapy |
| HCBS | Home and Community Based Services |
| HIPAA | Health Insurance Portability and Accountability Act |

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| HMO | Health Maintenance Organization |
| I&R | Information and Referral |
| ICF | Intermediate Care Facility |
| ICPC | Interstate Compact for the Placement of Children |
| ICM | Intensive Case Manager |
| ICPC | Interstate Compact for the Placement of Children |
| ID | Intellectual Disability |
| IDEA | Individuals with Disabilities Education Act or Interview for the Diagnosis of Eating Disorders |
| IEP | Individualized Educational Program |
| IFSP | Individualized Family Service Plan |
| IOP | Intensive Outpatient Therapy |
| IPT | Interpersonal Psychotherapy |
| IQ | Intelligence Quotient |
| ISP | Individualized Service Plan |
| IVIG | Intravenous Immunoglobulin |
| JCC | Juvenile Correctional Center |
| JCHC | Joint Commission on Health Care |
| JFNAP | Juvenile Firesetter Needs Assessment Protocol |
| JLARC | Joint Legislative Audit and Review Commission |
| LCSW | Licensed Clinical Social Worker |
| LEAP | Learning Experiences: an Alternative Program |
| LPC | Licensed Professional Counselor |
| M-CHAT | Modified Checklist for autism in Toddlers |
| MAEDS | Multiaxial Assessment of Eating Disorder Symptoms |
| MDD | Major Depressive Disorder |
| MCO | Managed Care Organization |
| MDD | Major Depressive Disorder |
| MDFT | Multidimensional Family Therapy |
| MH | Mental Health |
| MHA | Mental Health America |
| MI | Medically Indigent |
| MMR | Measles-Mumps-Rubella |
| MRI | Magnetic Resonance Imaging |
| MSW | Master of Social Work |
| MST | Multisystemic Therapy |
| MTFC | Multidimensional Treatment Foster Care |
| NAMI | National Alliance for the Mentally Ill |
| NCLB | No Child Left Behind |
| NCMHJJ | National Center for Mental Health and Juvenile Justice |
| NCSBY | National Center on Sexual Behavior of Youth |
| NCTSN | National Child Traumatic Stress Network |
| NES | Night Eating Syndrome |

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| NICHCY | National Dissemination Center for Children with Disabilities |
| NIDA | National Institute of Drug Abuse |
| NIMH | National Institute of Mental Health |
| NOS | Not Otherwise Specified |
| NSIB | Nonsuicidal Self-Injurious Behavior |
| OCD | Obsessive-compulsive Disorder |
| ODD | Oppositional Defiant Disorder |
| OJJDP | Office of Juvenile Justice and Delinquency Prevention |
| PACCT | Parents and Children Coping Together |
| PACT | Program of Assertive Community Treatment |
| PBD | Pediatric Bipolar Disorder |
| PAIMI | Protection and Advocacy for Individuals with Mental Illnesses Act |
| Part C | Part C of the Individuals with Disabilities Education Act (IDEA) |
| PCP | Primary Care Provider |
| PCPID | President's Committee for People with Intellectual Disabilities |
| PDD | Pervasive Developmental Disorder |
| PDDST-II | Pervasive Developmental Disorder Screening Test-II |
| PEATC | Parent Educational Advocacy Training Center (Virginia) |
| PECS | Picture Exchange Communication System |
| PEDS | Parents Evaluation of Developmental Status |
| PMT | Parent Management Training |
| POS | Point of Service |
| PPO | Preferred Provider Organization |
| PRT | Pivotal Response Training |
| PTSD | Posttraumatic Stress Disorder |
| PRWORA | Personal Responsibility and Work Intermediate Care Facility for persons with Opportunity Reconciliation Act of 1996 |
| PITS | Psychiatric Institute Trichotillomania Scale |
| RAD | Reactive Attachment Disorder |
| RCF | Residential Care Facility |
| RDI | Relationship Development Intervention |
| RTC | Residential Treatment Center |
| SAD | Separation Anxiety Disorder or Seasonal Affective Disorder |
| SAM | Society for Adolescent Medicine |
| SAMHSA | Substance Abuse and Mental Health Services Administration |
| SCHIP | The State Children's Health Insurance Program, Title XXI of the Social Security Act |
| SED | Serious Emotional Disturbance |
| SEDS | Stirling Eating Disorder Scale |
| SI | Self-injury or Sensory Integration |
| SNAP | Supplemental Nutrition Assistance Program |
| SNRIs | Serotonin and Norepinephrine Reuptake Inhibitors |
| SOC | Systems of Care |

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| SOLs | Standards of Learning |
| SP | Skin Picking or Specific Phobias |
| SPED | Special Education |
| SRED | Sleep-related Eating Disorders |
| SSRIs | Selective Serotonin Reuptake Inhibitors |
| TANF | Temporary Assistance for Needy Families |
| VDARS | Virginia Department of Aging and Rehabilitative Services |
| VDBHDS | Virginia Department of Behavioral Health and Developmental Services (formerly DMHMRSAS) |
| VDCE | Virginia Department of Correctional Education |
| VDCJS | Virginia Department of Criminal Justice Services |
| VDCSE | Virginia Child Support Enforcement |
| VDHP | Virginia Department of Health Professions |
| VDJJ | Virginia Department of Juvenile Justice |
| VDMAS | Virginia Department of Medical Assistance Services |
| VDOC | Virginia Department of Corrections |
| VDOE | Virginia Department of Education |
| VDSS | Virginia Department of Social Services |
| VIEW | Virginia Initiative for Education and Work |
| VIP | Virginia Independence Program |

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