

12.2 Common Disorders and Disabilities in Children and Adolescents

The most commonly diagnosed mental health disorders in children aged 13-17 years are attention deficit hyperactivity disorder (ADHD), anxiety problems, behavioral problems, and depression^[1]:

- ADHD: 9.8% (approximately 6.0 million)
- Anxiety: 9.4% (approximately 5.8 million)
- Behavioral problems: 8.9% (approximately 5.5 million)
- Depression: 4.4% (approximately 2.7 million)

For adolescents, depression, substance use, and suicide are important concerns. The following statistics demonstrate these concerns in adolescents aged 12-17 years in 2018-2019, prior to the COVID-19 pandemic^[2]:

- 36.7% had persistent feelings of sadness or hopelessness.
- 18.8% seriously considered attempting suicide; 8.9% attempted suicide.
- 15.1% had a major depressive episode.
- 4.1% had a substance use disorder.
- 1.6% had an alcohol use disorder.

After the COVID-19 pandemic, the Centers for Disease Control and Prevention (CDC) found an 8% increase in persistent feelings of sadness in youth.^[3]

These common disorders, as well as developmental disabilities, tics and Tourette syndrome, substance misuse, and gender dysphoria will be discussed in this section. Autism, another type of neurodevelopment

disorder, is discussed in the "[Autism Spectrum Disorder](#)" section.

Attention Deficit Hyperactivity Disorder

Attention deficit hyperactivity disorder (ADHD) is one of the most common neurodevelopmental disorders of childhood. It is usually first diagnosed in childhood and often lasts into adulthood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors, or are overly active.

^[4] See Figure 12.1^[5] for an image depicting a child struggling with symptoms of ADHD in school.



Figure 12.1 Child Struggling With Symptoms of ADHD in School

Signs and Symptoms

It is normal for children to exhibit challenging behaviors and have trouble focusing at certain times. However, children with ADHD often have more severe symptoms that cause difficulties at school, at home, or with friends^[6]:

- Daydreaming
- Forgetting or losing things

- Squirming or fidgeting
- Talking too much
- Making careless mistakes or taking unnecessary risks
- Difficulty resisting temptation
- Difficulty getting along with others

Diagnosing a child with ADHD is a process requiring several steps by a mental health professional. There is no single test to diagnose ADHD, and many other problems such as anxiety, depression, sleep problems, and learning disorders can have similar symptoms as ADHD. The diagnostic process includes a medical exam; hearing and vision tests; and a checklist rating ADHD symptoms completed by parents, teachers, and the child.^[7]

Types of ADHD

There are three types of ADHD, depending on which types of symptoms are strongest in the individual^[8]:

- **Predominantly Inattentive Presentation:** It is difficult for the individual to organize or finish a task, to pay attention to details, or to follow instructions or conversations. The person is easily distracted or forgets details of daily routines. The presentation of these symptoms can be missed or misinterpreted by others as "laziness" or "not paying attention."
- **Predominantly Hyperactive-Impulsive Presentation:** The person fidgets and talks a lot. It is hard for them to sit still for a length of time (such as during a meal or while doing homework). Young children may run, jump, or climb constantly. The individual feels restless and has trouble with impulsivity. Someone who is impulsive may interrupt others, grab things from other people, or speak at inappropriate times. It is hard for the person to wait their turn or listen to directions. A person with impulsiveness may also have more accidents and injuries than others.
- **Combined Presentation:** Symptoms of the above two types are

equally present in the person.

A person's symptoms of ADHD can change over time, and their predominant presentation may change over time as well.

Causes of ADHD

The cause(s) and risk factors for ADHD are unknown, but current research shows that genetics plays an important role. In addition to genetics, other possible risk factors include the following^[9]:

- Brain injury
- Exposure to environmental risks (e.g., lead) during pregnancy or at a young age
- Alcohol and tobacco use during pregnancy
- Premature delivery
- Low birth weight

Research does not support popularly held views that ADHD is caused by eating too much sugar, watching too much television, or ineffective parenting. Many of these factors may worsen symptoms, especially in genetically predisposed people, but the evidence is not strong enough to conclude that they are the main causes of ADHD.^[10]

Treatments for ADHD

Behavioral Therapy and Psychotherapy

In most cases, ADHD is best treated with a combination of behavior therapy and medication. For preschool-aged children (4-5 years old) with ADHD, parent training with behavioral management is recommended as the first line of treatment before medication is prescribed. ADHD affects a child's ability to pay attention and sit still at school as well as relationships with family and other children due to disruptive behaviors. Psychotherapy can improve a

child's behavior, self-control, and self-esteem.^[11] Read more in the ["Psychological Therapies and Behavioral Interventions"](#) section of this chapter.

Parent Education About Behavioral Management

Nurses can teach parents strategies for improving the behavior of their child or adolescent with ADHD^[12]:

- **Create a routine.** Try to follow the same schedule every day, from wake-up time to bedtime.
- **Get organized.** Encourage your child to put school bags, clothing, and toys in the same place every day so that they will be less likely to lose them.
- **Manage distractions.** Turn off the TV, limit noise, and provide a clean workspace when your child is doing homework. Some children with ADHD learn better if they are moving or listening to background music.
- **Limit choices.** To help your child not feel overwhelmed or overstimulated, offer choices with only a few options. For example, have them choose between this outfit or that one, this meal or that one, or this toy or that one.
- **Be clear and specific when you talk with your child.** Let your child know you are listening by describing what you heard them say. Use clear, brief directions when they need to do something.
- **Help your child plan.** Break down complicated tasks into simpler, shorter steps. For long tasks, starting early and taking breaks may help limit stress.
- **Use goals and praise or other rewards.** Use a chart to list goals and track positive behaviors, and then let your child know they have done well by telling them or by rewarding their efforts in other ways. Be sure the goals are realistic because progress towards small steps is important to maintain a child's self-esteem.
- **Discipline effectively.** Instead of scolding, yelling, or spanking, use

effective directions, time-outs, or removal of privileges as consequences for inappropriate behavior.

- **Create positive opportunities.** Children with ADHD may find certain situations stressful. Finding out and encouraging what your child does well, whether it's school, sports, art, music, or play, can help create positive experiences.
- **Provide a healthy lifestyle.** Nutritious food, lots of physical activity, and sufficient sleep are important for preventing ADHD symptoms from getting worse.
- **Communicate regularly with teachers.** Clear, regular communication between teachers and parents helps reinforce behavior management strategies at school and at home.

Parents can also be referred to ADHD support groups in the following box.

Support Groups for ADHD

[CHADD](#): Information and resources on ADHD, including treatment options, local support groups for clients and parents, and online support communities

[Attention Deficit Disorder Association \(ADDA\)](#): Information and resources on ADD for adults living with the disorder, including support groups and workshops

[Psychology Today Support Groups](#): Support groups near you for ADHD and other conditions

Medications

Medication may be prescribed to help children aged six and older manage their ADHD symptoms and help them control behaviors that cause difficulties with family, friends, and at school.^[13]

Before medications are initiated, a comprehensive medical exam including height, weight, blood pressure, heart rate, and cardiovascular history should

be performed. A pretreatment baseline should be established for common side effects such as appetite, sleep, headaches, and abdominal pain. Adolescent clients should also be assessed for substance use.^[14]

The choice of medication by the prescriber depends on many factors, such as the following^[15]:

- Duration of coverage (e.g., desired coverage for school day plus completion of homework)
- The desire to avoid medication administration at school
- The ability of the child to swallow pills or capsules
- Coexisting emotional or behavioral conditions
- History of substance abuse in the client or a household member (i.e., stimulants with less abuse potential are prescribed)
- Expense
- Preferences of the child and their caregivers

Stimulants

Stimulants such as methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and dextroamphetamine-amphetamine (Adderall) are considered first-line treatment because of rapid onset of action and a long record of safety and efficacy. Stimulants are available in short-, intermediate-, and long-acting formulations. The exact mechanism of action of stimulants in ADHD is unknown, but they are known to affect the dopaminergic and noradrenergic systems, causing a release of catecholamines. Stimulants have been found to improve caregiver-child interactions, aggressive behavior, and academic productivity.^[16]

Stimulants are controlled substances and require a Schedule II prescription.

Black Box Warning

CNS stimulants, including methylphenidate and amphetamine-like

substances, have a high potential for abuse and dependence. The risk of abuse by the client or their family members should be assessed prior to prescribing stimulants, and signs of abuse and dependence should be evaluated while the client is receiving therapy.^[17]

Side Effects

Stimulants may cause minor side effects that resolve when dosage levels are lowered, or a different stimulant is prescribed. The most common side effects include the following^[18],^[19]:

- Difficulty falling asleep or staying asleep
- Loss of appetite and weight loss
- Stomach pain
- Headache

Less common side effects include motor or verbal tics (sudden, repetitive movements or sounds) or personality changes (such as appearing “flat” or without emotion).^[20] Sudden death, stroke, and myocardial infarction have been reported in adults with CNS-stimulant treatment at recommended doses. Sudden death has been reported in pediatric clients with structural cardiac abnormalities and other serious heart problems taking CNS stimulants at recommended doses. If paradoxical worsening of symptoms or other adverse reactions occur, the provider should be contacted, and the dosage reduced or discontinued. Stimulants are contraindicated in clients using a monoamine oxidase inhibitor (MAOI) or using an MAOI within the preceding 14 days.^[21]

Nurses should be aware there is a possibility of diversion or misuse of stimulants by adolescents or their caregivers. Up to 29 percent of school- and college-aged students with stimulant prescriptions have been asked to give, sell, or trade their medication.^[22]

Selective Norepinephrine Reuptake Inhibitors

Selective norepinephrine reuptake inhibitors (SNRIs) such as atomoxetine (Strattera) are an alternative to stimulants for clients who experience side effects with stimulants. They may also be helpful in treating concurrent depressive or anxiety disorders. SNRIs are not controlled substances, so they may be prescribed for adolescents (or their family members) with substance use disorders. The dosage depends on the child's weight, and the duration of action is 10 to 12 hours. Atomoxetine has a Black Box Warning about increased risk of suicidal thinking in children and adolescents.^[23]

Alpha-2 Adrenergic Agonists

Alpha-2 adrenergic agonists such as clonidine are typically used when children respond poorly to stimulants or SNRIs, have unacceptable side effects, or have significant coexisting conditions.

Patient and Parent Education

There are several important patient education topics to provide to clients and/or the parents of minor children^[24]:

- **Controlled Substance Status/High Potential for Abuse and Dependence:** Stimulants are a controlled substance by the FDA and can be abused and lead to dependence. Stimulants should be stored in a safe (preferably locked) place to prevent misuse and should not be shared with anyone. Unused or expired stimulants should be disposed of based on state law and regulations or returned to a medicine take-back program if it is available in the community.
- **Cardiovascular Risks:** Stimulants can increase one's blood pressure and pulse rate. There is a potential serious cardiovascular risk, including sudden death, cardiomyopathy, myocardial infarction, stroke, and hypertension. Instruct clients to contact a health care provider immediately if they develop symptoms, such as exertional chest pain, dizziness, or passing out.
- **Suppression of Growth:** Stimulants may cause slowing of growth in

children and weight loss.

- **Psychiatric Risks:** Stimulants can cause psychosis or manic symptoms, even in clients who have no prior history of these symptoms.
- **Priapism:** Painful or prolonged penile erections can occur; seek immediate medical attention.
- **Alcohol:** Alcohol should be avoided when taking extended-release capsules.

Nurses should reinforce with the client and their family members that the reason for the prescribed medication is to help with self-control and the ability to focus. Possible side effects should be reviewed, and clients and their family members should be reminded it may take one to three months to determine the best pharmacological treatment, dose, and frequency of medication administration. During this time, the child's symptoms and adverse effects will be monitored weekly and the medication dose adjusted accordingly.^[25]

ADHD Into Adulthood

ADHD lasts into adulthood for at least one third of children with ADHD. Treatments for adults can include medication, psychotherapy, or a combination of treatments.^[26]

Anxiety

All children experience some anxiety, and anxiety is expected at specific times of a child's development. For example, from approximately age 8 months through the preschool years, healthy youngsters may show anxiety when separated from their parents or caregivers. Young children also commonly have fears, such as fear of the dark, storms, animals, or strangers.

^[27] Anxiety is functional and normal when situational. Consider the fear of dangerous situations such as approaching a rattlesnake or standing on a steep cliff; at crucial times anxiety is important because it provides safety.

Anxiety is also motivational as it drives adolescents to accomplish goals such as passing a test by working hard and studying.

When a child is overly worried or anxious, a nurses' initial assessment should determine if conditions in the child's environment are causing this feeling. For example, is the anxiety resulting from being bullied or from adverse childhood experiences (ACEs)? If so, protective interventions should be put into place. If no realistic threat exists and the anxiety causes significant life dysfunction, then the child should be referred to a mental health provider to determine if an anxiety disorder exists.^[28]

Read more about "[Adverse Childhood Experiences](#)" in the "Trauma, Abuse, and Violence" chapter.

Symptoms of Anxiety Disorder in Children and Adolescents

Children with anxiety disorders are overly tense or fearful; some may seek lots of reassurance; and their worries may interfere with daily activities. Because anxious children may also be quiet, compliant, and eager to please, their feelings of anxiety can be easily missed. When a child does not outgrow the typical fears and anxieties in childhood or when there are so many fears and worries they interfere with school, home, or play activities, the child may be diagnosed with an anxiety disorder. Examples of symptoms related to different types of anxiety disorders in children and adolescents include the following^[29]:

- Being very afraid when away from parents or caregivers (i.e.,)
- Having extreme fear about a specific thing or situation, such as dogs, insects, or going to the doctor (i.e., phobias)
- Being very afraid of school and other places where there are people (i.e., social anxiety)
- Being very worried about the future and about bad things happening

(i.e., general anxiety)

- Having repeated episodes of sudden, unexpected, intense fear associated with symptoms like fast heart rate, trouble breathing, dizziness, or shakiness (i.e., panic disorder)

Anxiety can also make children irritable and angry and can include physical symptoms like fatigue, headaches, stomachaches, or trouble sleeping.^[30]

Treatment of Anxiety Disorders in Children and Adolescents

Early treatment of anxiety disorders in children can enhance friendships, social and academic potential, and self-esteem. Interprofessional treatments often include a combination of individual psychotherapy and behavioral therapy, family therapy, medications, and consultations with the child's school.^[31] Read more about psychological and behavioral treatments for children and adolescents in the "[Psychological Therapies and Behavioral Interventions](#)" section.

Read additional information about anxiety disorders and associated treatments in the "[Anxiety Disorders](#)" chapter. Post-traumatic stress disorder (PTSD) can develop in children or adolescents who have experienced a shocking, frightening, or dangerous event. It has similar symptoms to severe anxiety. Read more in the "[Post-Traumatic Stress Disorder](#)" section of the "Anxiety Disorders" chapter. There is also an association between obsessive-compulsive disorder (OCD) and children who have been exposed to trauma. Read more in the "[Obsessive-Compulsive Disorder](#)" section of the "Anxiety Disorders" chapter.

Depression

Every child, adolescent, and adult feels sad occasionally. However, some children feel sad, hopeless, or uninterested in things they previously enjoyed.

When a child appears withdrawn or sad for two or more weeks, they may be diagnosed with a depressive disorder.^[32]

Symptoms of Depressive Disorders in Children and Adolescents

Examples of behaviors observed in children and adolescents with a depressive disorder are as follows^[33]:

- Feeling sad, hopeless, or irritable most of the time
- Not wanting to do or enjoy fun things
- Showing changes in eating patterns (e.g., eating a lot more or a lot less than usual)
- Showing changes in sleep patterns (e.g., sleeping a lot more or a lot less than normal)
- Showing changes in energy (e.g., being tired and sluggish or tense and restless most of the time)
- Difficulty paying attention
- Feeling worthless, useless, or guilty
- Engaging in self-injury or self-destructive behavior
- Having suicidal thoughts or making a plan for suicide
- Exhibiting physical complaints, such as frequent headaches or stomachaches
- Using alcohol or drugs as a way of trying to feel better

Depression might also cause a child to appear unmotivated or act out, causing others to incorrectly label the child as "lazy" or a "trouble-maker."^[34]

It is important to ask children and adolescents who are withdrawn or sad about self-harm risks. Adolescents may perceive a single disappointment (such as a relationship break-up) as so catastrophic they feel suicidal or begin to hurt themselves.^[35]

The cause of depression is not always known. Depression can be hereditary

but can also be situational or environmental. Some causes of depression are increased stress, death of a family member or close friend, social media, and bullying. Having other conditions such as attention problems, learning disorders, anxiety, or conduct disorders create a higher risk for depression.

[36]

Treatment of Depressive Disorders in Children and Adolescents

If a child or adolescent is suspected to have depression, a nurse or school counselor can refer them to a mental health professional to conduct a comprehensive assessment and plan effective treatments. Treatment may include psychotherapy, behavioral therapy with the child and their family members, and collaboration with the child's school. Cognitive behavioral therapy (CBT), interpersonal psychotherapy (IPT), and antidepressant medications are effective in treating depression in children. Read more about behavioral treatments in the "[Psychological Therapies and Behavioral Interventions](#)" section.

Read more about depression in the "[Depressive Disorders](#)" chapter.

Behavior Disorders

Children sometimes argue or act angry or defiant around adults. However, a behavior disorder is diagnosed when disruptive behaviors are uncommon for the child's age, persist over time, or are severe. Two types of behavior disorders are oppositional conduct disorder and conduct disorder.^[37]

Oppositional Defiant Disorder

All children are oppositional from time to time, particularly when they are feeling tired, hungry, stressed, or upset. They may argue, talk back, disobey, and defy parents, teachers, or other adults. Oppositional behavior is considered a normal part of development for children two to three years of

age and early adolescents. However, uncooperative and hostile behavior becomes a serious concern when it is so frequent and consistent that it stands out when compared with other children of the same age or when it significantly affects the child's social, family, and academic life.^[38]

When children act out persistently causing serious problems at home, in school, or with peers, they may be diagnosed with **oppositional defiant disorder (ODD)**. Up to 16 percent of all school-age children and adolescents have ODD. ODD usually starts before 8 years of age but no later than 12 years of age. Children with ODD are more likely to act oppositionally or defiantly around people they know well, such as family members, a regular care provider, or a teacher.^[39]

Examples of ODD behaviors include the following^[40]:

- Often being angry or losing one's temper
- Often arguing with adults or refusing to comply with adults' rules or requests
- Often being resentful or spiteful
- Deliberately annoying others or becoming annoyed with others
- Often blaming other people for one's own mistakes or misbehavior

Many children with ODD may have coexisting conditions such as anxiety, post-traumatic stress disorder (PTSD), ADHD, autism, learning disabilities, or substance abuse. See Figure 12.2^[41] for an illustration of conditions that can be mistaken for ODD.

Conditions and issues that could be mistaken for Oppositional Defiant Disorder



Figure 12.2 Conditions That Can Be Mistaken for Oppositional Defiant Disorder

Treatment of ODD

Treatment of ODD includes the following^[42]:

- Parent behavioral management training to help parents manage the child's behavior
- Individual psychotherapy to develop more effective anger management skills
- Family psychotherapy to improve communication and mutual understanding
- Cognitive behavioral therapy and other psychotherapies to decrease negativity and enhance effective problem-solving
- Social skills training to increase flexibility and improve frustration tolerance with peers

Medications may be prescribed to control distressing symptoms of ODD, as well as symptoms related to coexisting conditions such as ADHD, anxiety, and mood disorders.^[43]

Parent Education

Parents of children diagnosed with ODD need support and understanding. Nurses can teach parents to help their child with ODD in the following ways^[44]:

- **Build on the positives.** Give the child praise and positive reinforcement when they show flexibility or cooperation. Discipline will not work if there are no positive interactions.
- **Take a time-out or break.** If conflict with your child is progressively getting worse instead of better, take a time-out break. Demonstration of taking a break is also good modeling for the child. If the child decides to take a time-out to prevent overreacting, they should receive support for doing so.
- **Prioritize your battles.** Because the child with ODD has trouble avoiding power struggles, prioritize the things you want your child to do. For example, if you give your child a time-out in their room for misbehavior, don't add time to the time-out for arguing. Instead, calmly say, "Your time will start when you go to your room." Listen when they shout, but do not shout back.
- **Set reasonable, age-appropriate limits and consequences.** Set limits and establish consequences that can be enforced consistently.
- **Maintain other interests.** Manage your stress with healthy life choices such as exercise and relaxation. Maintain personal interests so that managing your child with ODD doesn't take all your time and energy. Use respite care and other breaks as needed.
- **Obtain support.** Collaborate and obtain support from other adults working with your child (e.g., teachers and coaches).

Conduct Disorder

is diagnosed when a child shows an ongoing pattern of aggression toward others with serious violations of rules and social norms at home, school, and

with peers. These rule violations may involve breaking the law and result in arrest.^[45] Adults with antisocial conduct disorder typically show symptoms of CD before age 15.^[46]

Examples of CD behaviors are as follows^[47]:

- Breaking serious rules, such as running away, staying out all night, or skipping school
- Being aggressive in a way that causes harm, such as bullying, fighting, or being cruel to animals
- Lying, stealing, or purposefully damaging other people's property

Children who exhibit these serious behaviors should receive a comprehensive evaluation and treatment by a mental health professional. Some signs of behavior problems, such as not following rules in school, can be related to learning disorders that require additional assessment and interventions. Without treatment, many youngsters with conduct disorder are likely to have ongoing problems resulting in the inability to adapt to the demands of adulthood.^[48]

Treatment for CD

Starting treatment early for CD is important. For younger children, research indicates the most effective treatment is behavior therapy training for parents where a therapist helps the parent learn effective ways to strengthen the parent-child relationship and respond to the child's behavior. For school-age children and teens, a combination of behavior therapy training that includes the child, the family, and the school is most effective.^[49] Read more about treatment in the "[Psychological Therapies and Behavioral Interventions](#)" section.

Developmental Disabilities

Developmental disabilities are a group of conditions with physical,

learning, language, or behavioral impairments. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person's lifetime.^[50] Research indicates about 17% of children are diagnosed with a developmental disability such as blindness, hearing loss, learning disability, intellectual disability, stuttering, attention deficit hyperactivity disorder (ADHD), or autism spectrum disorder.^[51]

Keep in mind that having a developmental disability does not mean the person is not healthy. Being healthy means staying well so one can lead a full, active life.^[52]

Read more information about autism in the "[Autism Spectrum Disorder](#)" section and ADHD in the "Attention Disorder and Hyperactivity Disorder" subsection presented earlier in this section.

Causes and Risk Factors

Developmental disabilities begin anytime during the developmental period and usually last throughout a person's lifetime. Most developmental disabilities begin before a baby is born, but some can occur after birth because of injury, infection, or other factors. Many developmental disabilities are thought to be caused by a complex mix of factors including genetics, parental health and behaviors (such as maternal infections or substance use during pregnancy), complications during birth, infections the baby had very early in life, or exposure of the mother or child to high levels of environmental toxins, such as lead. However, there is no known cause for most developmental disabilities.^[53]

Diagnosis of Developmental Disabilities

Developmental disabilities are diagnosed by developmental monitoring and developmental screening through a partnership between parents and health care professionals as a child's growth and development are monitored.

Every child should receive routine screenings for developmental delays at their well-child visits. During a well-child visit, the provider performs by observing for signs of developmental delays and talking with parents about any concerns they might have about their child's growth and development. If any problems are noted during developmental monitoring, **developmental screening** is performed. Standardized tools used during developmental screening are formal questionnaires or checklists based on research that ask questions about a child's development, including language, movement, thinking, behavior, and emotions. Developmental screening can be done by a doctor or nurse but may also be performed by other professionals in health care, early childhood education, community, or school settings to determine if a child is learning as expected or if there are delays.^[54]

View an image of developmental milestones in Figure 12.3.^[55]



Figure 12.3 Developmental Milestones

View the [CDC's Developmental Milestones](#) and [Milestone Checklists PDF](#).

Types of Disorders

Based on developmental screenings, children may require further evaluation for language and speech disorders, learning disorders, and intellectual disabilities.

Language and Speech Disorders

Some children struggle with understanding language and speaking. If they do not achieve the developmental milestones for language, it can be a sign of a language or speech disorder.^[56]

Language development has many components. Children might have problems with one or more of the following^[57]:

- **Receptive Language:** Difficulty understanding what others say due to not hearing the words (hearing loss) or not understanding the meaning of the words.
- **Expressive Language:** Difficulty communicating thoughts using language due to not knowing the words to use, not knowing how to put words together, or not being able to express the words.

Examples of problems with language and speech development include the following conditions^[58]:

- Difficulty forming specific words or sounds correctly
- Difficulty making words or sentences flow smoothly, such as stuttering
- Difficulty understanding language and speaking language
- Difficulty understanding the meaning of the sounds the ear sends to the brain (i.e., auditory processing disorder)

Children with language disorders may feel frustrated when they cannot understand others or make themselves understood and, as a result, may act out, act helpless, or withdraw. Language or speech disorders may also be

present with other disorders such as ADHD, anxiety, or autism.^[59]

If a child experiences difficulties with language or speech development, it is important to first determine if the child has hearing loss. Hearing loss may be difficult to notice, especially if a child has hearing loss in only one ear or has partial hearing loss (i.e., they can hear certain sounds but not others). A speech-language pathologist will conduct a careful assessment and work directly with the child and their parents, caregivers, and teachers for customized interventions according to the child's condition.^[60]

Learning Disorders

Many children may struggle with learning certain topics or skills in school from time to time. However, when children struggle with learning specific skills over time, it can be a sign of a learning disorder. Having a **learning disorder** means that a child has difficulty in one or more areas of learning, even when their overall intelligence or motivation are not affected.^[61]

Some symptoms of learning disorders are as follows^[62]:

- Difficulty telling right from left
- Reversing letters, words, or numbers, after the first or second grade
- Difficulties recognizing patterns or sorting items by size or shape
- Difficulty understanding and following instructions or staying organized
- Difficulty remembering what was just said or what was just read
- Lacking coordination when moving around
- Difficulty doing tasks with the hands, like writing, cutting, or drawing
- Difficulty understanding the concept of time

Examples of learning disorders include the following^[63]:

- **Dyslexia:** Difficulty with reading
- **Dyscalculia:** Difficulty with math
- **Dysgraphia:** Difficulty with writing

Children with learning disorders may feel frustrated when they cannot learn a topic or skill (despite trying hard to do so) and may act out, act helpless, or withdraw. Learning disorders may also be present with other disorders, such as ADHD or anxiety, making it hard for a child to succeed in school. Children with learning disorders often require specialized instruction to meet their needs.^[64]

Intellectual Disabilities

is defined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM5)* as a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains. The following criteria must be met for an individual to be diagnosed with an intellectual disability^[65]:

- Deficits in intellectual functions, such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning, and learning from experience that is confirmed by both clinical assessment and individualized, standardized intelligence testing.
- Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments such as home, school, work, and the community.
- Onset of intellectual and adaptive deficits occurs during the developmental period.

Levels of intellectual disability vary greatly in children. Children with an intellectual disability might have a hard time communicating their needs, and an intellectual disability can cause them to develop more slowly than other children of the same age. Intellectual disability can be caused by a problem that starts any time before birth to when a child turns 18 years old. It can be

caused by injury, disease, or other dysfunction in the brain. For many children, the cause of their intellectual disability is not known.^[66]

The more severe the degree of intellectual disability, the earlier the signs can be noticed during developmental monitoring, such as the following^[67]:

- Sitting up, crawling, or walking later than other children
- Talking later than other children or having trouble speaking
- Difficulty remembering things
- Difficulty understanding social rules
- Difficulty seeing the results of their actions
- Difficulty solving problems

Children who are suspected to have an intellectual disability based on developmental screening are referred to a developmental pediatrician or other specialist for treatment.

Tics and Tourette Syndrome

Tourette syndrome (TS) and other tic disorders affect approximately 1% of school-aged children in the United States.^[68] are sudden twitches, movements, or sounds that people do repeatedly with the inability to stop their body from doing these actions. There are two types of tics: motor and vocal. are movements of the body such as blinking, shrugging the shoulders, or jerking an arm. **Vocal tics** are sounds that a person makes with his or her voice such as grunting, humming, clearing the throat, or yelling out a word or phrase. Although the media often portray people with TS as involuntarily shouting out swear words (i.e., coprolalia) or constantly repeating the words of other people (i.e., echolalia), these symptoms are rare.^[69]

The primary symptom of Tourette syndrome (TS) is tics that typically begin when a child is 5 to 10 years old. The first symptoms are often motor tics that occur in the head and neck area. Tics are often worse during times that are stressful or exciting and tend to improve when a person is calm or

focused on an activity.^[70]

In most cases, tics decrease during adolescence and early adulthood, and sometimes disappear entirely. However, many people with TS experience tics into adulthood and, in some cases, tics can become worse during adulthood.^[71]

Tics are typically mild and do not require treatment, but it is essential to educate the individual and others about TS and provide appropriate support across all settings (e.g., school, work, and home). When tics become problematic or interfere with daily functioning, behavioral treatment or medication may be considered.^[72]

View the following YouTube video of individuals with tics^[73]: [Tourette Syndrome is...](#)

To read more about Tourette syndrome and tics, go to [Tourette Association of America](#).

Substance Use Disorders

Children and adolescents use alcohol and other substances for many reasons that may include maladaptive coping strategies. Alcohol is the most commonly used substance among young people in the United States. Data from several national surveys document frequent use of alcohol among young people. The 2019 Youth Risk Behavior Survey found these statistics among high school students during the past 30 days^[74]:

- 29% drank alcohol.
- 14% binge drank.
- 5% of drivers drove after drinking alcohol.
- 17% rode with a driver who had been drinking alcohol.

is defined as a pattern of alcohol consumption that brings the blood alcohol

concentration level to 0.08% or more. This pattern of drinking usually corresponds to five or more drinks on a single occasion for males or four or more drinks on a single occasion for females within about two hours.

Youth who binge drink alcohol are more likely to experience these issues^[75]:

- School problems, such as higher rates of absences or lower grades
- Social problems, such as fighting or lack of participation in youth activities
- Legal problems, such as arrest for driving or physically hurting someone while drunk
- Physical problems, such as hangovers or illnesses
- Unwanted, unplanned, and unprotected sexual activity
- Disruption of normal growth or sexual development
- Physical and sexual violence
- Increased risk of suicide and homicide
- Alcohol-related motor vehicle crashes and other unintentional injuries, such as burns, falls, or drowning
- Memory problems
- Misuse of other substances
- Changes in brain development that may have lifelong effects
- Alcohol poisoning

Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. The 2019 National Survey on Drug Use and Health reports that approximately 20.3 million people aged 12 or older had a substance use disorder in the past year.^[76]

The Substance Abuse and Mental Health Services Administration (SAMHSA) has developed a national campaign called “Talk. They Hear You” to help parents and caregivers start talking with their children early about the

dangers of alcohol and other drugs.^[77] See Figure 12.4^[78] for an example of a public service announcement from the “Talk. They Hear You” campaign.

Figure 12.4 Image from “Talk. They Hear You” Campaign

Read more information in the “[Substance Use Disorders](#)” chapter.

Gender Dysphoria

Distinctions between gender, sexual orientation, and sexual behavior are a critical concept in adolescent health and are greatly influenced by one’s culture. Gender is assigned at birth based on the medical assessment of genitalia. Anatomical characteristics and chromosomes determine whether a person is biologically male or female. Gender identity, gender roles, and gender expression are psychological and cultural constructs referring to various aspects of maleness, femaleness, or other nonbinary designation.^[79]

is an individual’s innate sense of being male, female, androgenous (i.e., of

indeterminant sex), nonbinary (i.e., a blend of both genders or don't identify with either gender), or a preference to reject gender designation. An individual's gender identity is generally established during early childhood but may evolve across their life span. **Gender roles** are social constructs based on masculinity and femininity that embody one's culture's expectations, attitudes, behaviors, and personality traits based on one's biological sex. refers to how an individual presents one's gender to the outside world, but it does not necessarily correlate with their gender identity.
[80]

An individual's gender identity is influenced during early childhood by one's parents and immediate family members defining how a person expresses themselves as members of their gender. As children become adolescents, their influences broaden with peer, media, and community norms of gender and sexuality impacting their individual value systems.
[81]

When a person's biological sex differs from their gender identity, they experience feelings of unease about their incongruent maleness or femaleness referred to as . For example, a biologic male with an innate sense of being female may describe himself as "a woman trapped in a man's body."
[82] People who are have a gender identity or gender expression that differs from the sex they were assigned at birth. See Figure 12.5^[83] for an image of a person displaying a sign at a rally for transgender equality.

According to the *DSM-5*, at least six of the following symptoms must be exhibited for at least six months and associated with distress or impaired functioning in order for a child to be diagnosed with gender dysphoria^[84]:

- A strong desire to be of the other gender or an insistence they are another gender
- A strong preference for dressing in clothing stereotypical of the other gender
- A strong preference for playing with toys, games, or activities stereotypical of the other gender
- A strong rejection of the toys, games, and activities stereotypical of their assigned gender
- A strong preference for cross-gender roles when playing
- A strong preference for playmates of the other gender
- A strong dislike of one's sexual anatomy
- A strong desire to have the primary and/or secondary sex characteristics of the other gender

Only a small percentage of children who display gender dysphoria will continue to show these characteristics into adolescence or adulthood. Adolescents with gender dysphoria who dread the appearance of secondary sexual characteristics may seek hormones or surgery to alter their masculinity or femininity.^[85]

Sexual orientation is different from gender identity and gender expression. Sexual orientation refers to an individual's pattern of physical, emotional, and romantic arousal (including fantasies, activities, and behaviors) and the gender(s) of persons to whom an individual is physically or sexually attracted. An individual's assessment of their sexual orientation is termed . Formation of sexual identity may be fluid with experimentation with same-gender sexual contacts as part of adolescent development. Approximately 5 to 10 percent of teens identify as lesbian, gay, or bisexual.^[86]

Adolescents and adults who are mature and healthy in their sexuality are able to do the following^[87]:

- Take responsibility for one's own behavior
- Practice effective decision-making
- Affirm that human development includes sexual development, which may or may not include reproduction or sexual experience
- Seek further information about sexuality and reproduction as needed and make informed choices about family options and relationships
- Interact with all genders in respectful and appropriate ways
- Affirm one's own gender identity and sexual orientation and respect the gender identities and sexual orientations of others
- Appreciate one's body and enjoy one's sexuality throughout life, expressing one's sexuality in ways that are congruent with one's values
- Express love and intimacy in appropriate ways
- Develop and maintain meaningful relationships, avoiding exploitative or manipulative relationships
- Exhibit skills and communication that enhance personal relationships with family, peers, and romantic partners

Health risks and adverse outcomes can occur among youth who are gender-diverse or from sexual minorities. Risks and adverse outcomes can include child abuse, bullying, sexual harassment, teen dating violence, unprotected sex with risks for sexually transmitted infections and pregnancy, mental health problems (depression, anxiety, suicide, and disordered eating and body image), and substance use.^[88]

Nurses should ask all clients, including adolescents, about their gender preferences and provide support if the client indicates a need for help. By promoting sexuality as healthy, respectful, and meaningful in the global context of adolescent development, nurses can encourage a positive model of empowerment for youth exploring their gender and sexual identities.^[89]

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