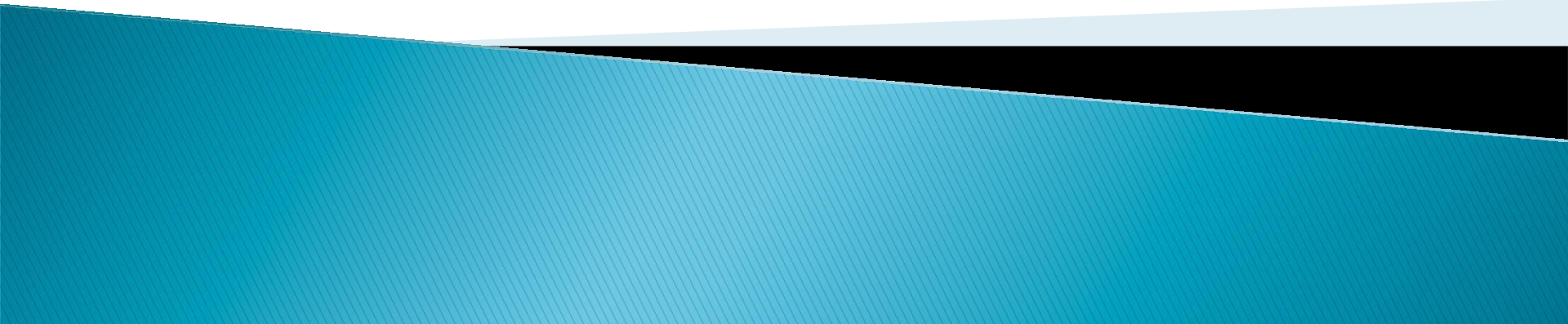
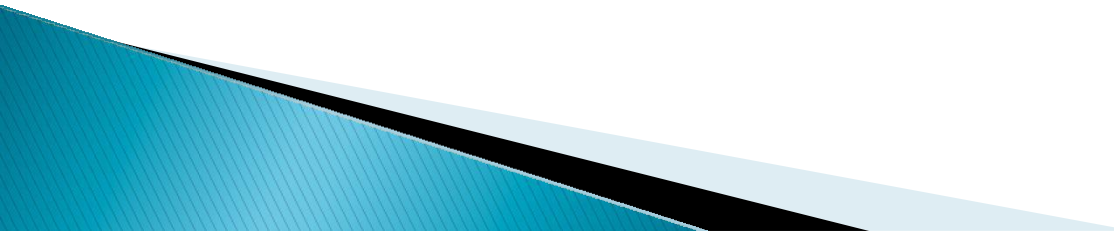


Mental illnesses in children and adolescents



Intellectual disability (ID)

- It is characterized by deficits in intellectual and adaptive functioning of varying severity presenting before 18 years of age.
 - A neurodevelopmental disorder with multiple etiologies.
 - ID encompasses a broad spectrum of functioning.
 - Affects approximately 1% of population
 - It is an important public health issue because of its prevalence and the need for support services.
 - Clinical presentation: language delay, immature behavior/play, immature self-help skills, learning difficulties, failure to meet expected developmental milestones.
- 

ID etiology

Diverse, including e.g.

- Cerebral palsy
- Genetic disorders
- Metabolic diseases
- Structural defects of the brain
- Intrauterine infections, especially TORCH
- Early-onset epilepsy, especially infantile spasms

and many, many others

ID may be associated e.g. with autism, attention deficit hyperactivity disorder (ADHD)



Intellectual disability (ID)

Disability level	IQ	Developmental age (years)	Educational level	Support needed
Mild ID	69-50	12-9	Primary school	Occasional support
Moderate ID	49-35	8-6	Special education	Moderate, daily support
Severe ID	34-20	5-3	Special education and daily support	Consecutive care
Profound ID	19-0	<2	---	Specialized institution

Partial deficits

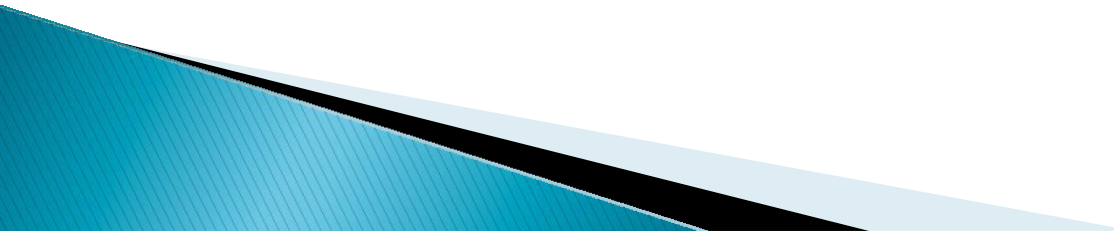
} Speech:

- Articulation
- Expression
- Understanding

} Learning skills:

- Reading
- Writing
- Calculating

ID diagnosis

- Routine assessment of child's development and meeting developmental milestones
 - Standardized psychological tests
 - Tests helping to diagnose the cause of ID: genetic testing, brain imaging, EEG, metabolic studies etc.
- 

ID treatment

Early diagnosis, intervention and support are the most important

- Early intervention and developmental support
- Rehabilitation
- Therapy of sensory integration
- Special education

Depending on the cause: e.g antiseizure drugs



Attention deficit hyperactivity disorder (ADHD)

} Attention deficits, hyperactivity, impulsiveness

} Attention deficits:

- Difficulty of sustaining attention

ADHD – incidence

- } The most common psychiatric disorder in children treated in outpatients clinics
- } 5-7% affected children in early primary school
- } Boys are more often affected

It is important to remember - not all misbehaving children have ADHD

Sometimes they are just a result of bad parenting

ADHD is diagnosed by a psychologist using special, standardized tests

ADHD symptoms

- } Hyperactivity/impulsiveness
 - „twirling”
 - talkativeness
 - Impatience – inability to wait in line
 - Interrupting/interference during conversation

ADHD symptoms

- } Present for at least 6 months
- } Onset before 7 years of age
- } Deterioration in at least 2 different functional fields
- } Significant aggravation of learning results

ADHD clinical course

- } 30–80% of patients present some symptoms also during adolescence and adulthood
- } ADHD increases the risk of psychoactive substances abuse

ADHD - summary

<https://www.youtube.com/watch?v=AbmYkcEIGKY&list=PLVnjTkEww-uNBqGkNdbR2AdfB8PBKdCAE&index=74>

Autism spectrum disorder (ADS)

Is a neurodevelopmental disorder characterized by persistent deficits in social communication and social interaction and restricted, repetitive patterns of behavior, interests, and activities.

Onset in first 24 months

Significant deficits in 3 functional fields

0.04% = 4/10,000 infants

4:1 male to female ratio

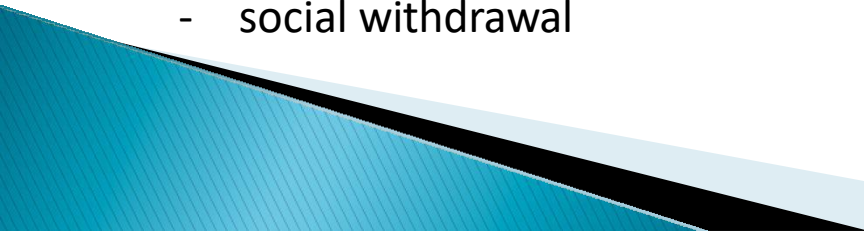
80% has IQ level < 70

If untreated, it can lead to impaired social functioning and communication disturbances in later life

Autistic disorders are very diverse in nature, they do not create a uniform picture ("spectrum of autistic disorders")

Autism- first symptoms:

ASD should be suspected in children with abnormalities in social interaction that are not better explained by impaired language or cognitive skills. The abnormal social interactions are due to limited social communication skills (eg, difficulty with social attention and dyadic conversation with a limited ability to understand another's perspective) as well as restricted, repetitive patterns of behavior, interests, and activities.

- intense focus on one item,
 - unresponsiveness, lack of understanding social cues (like tone of voice or body language, metaphores, some jokes),
 - repetitive movements or self-abusive behavior like head-banging,
 - Repetitive, stereotypic activity/play and angriness when something is done differently than a previously or out of the pattern
 - learning to speak relatively late, not playing interactively with other children,
 - avoidance of eye contact,
 - lack of emotional contact and impaired empathy,
 - social withdrawal
- 

Autism - symptoms

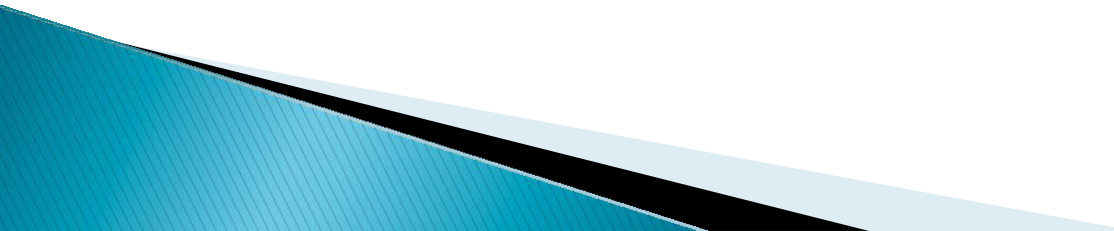
} Deterioration of verbal communication

- Delay or absence of speech development
 - 50% never speak
- Abnormal form or content of speech
- Inability to initiate or maintain the conversation

Autism - symptoms

- } Restricted and stereotypic kinds of activity and interests:
 - Stereotypic movements
 - Concentration on details
 - Difficulties in adjusting to new or unusual situations
 - Restricted or odd hobbies

Autism – ethiology:

- genetic predisposition/diseases (fragile X syndrome and other genetic disorders)
 - being born to older parents
 - low birth weight
 - metabolic imbalances
 - exposure to heavy metals and environmental toxins
 - a history of viral infections
- 

Autism– clinical course

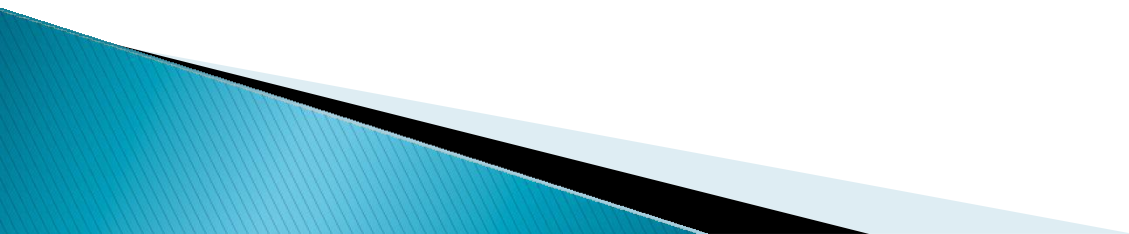
- } 50% required special institutional care
- } 35-45% required daily care
- } 5-17% relatively well-functioning

- } Better prognosis:
 - Higher IQ level
 - Speech development before 5 years of age

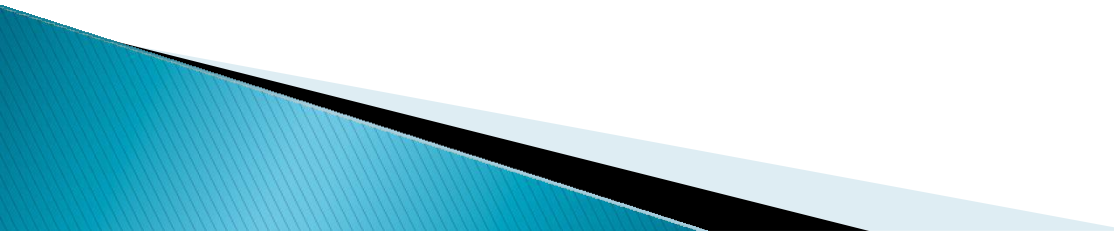
ASD diagnosis

Usually made by psychologists using standardized tests assessing the development in particular fields.

Due to ongoing development, definite diagnosis is rarely set before the 3rd year of life but symptoms of ASD may be observed since infancy



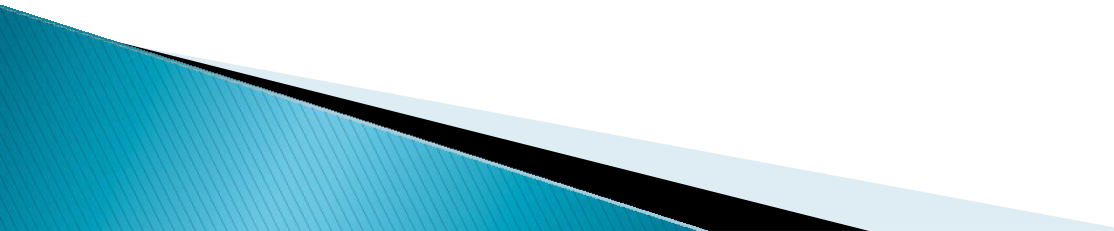
Autism – treatment:

- early diagnosis and comprehensive, supporting therapy increase the chances of improving social functioning,
 - therapy should be intensive, systematic and adapted to the individual needs and capabilities of the child,
 - additional diseases may worsen the functioning of patients, e.g. coexistence of epilepsy,
 - adequate support for parents and the children,
 - no evidence of the therapeutic effect of elimination diets
- 

Behavioral problems

A complex set of emotional and general behavioral problems of children and adolescents.

In the American classification of mental disorders DSM-IV, behavioral disorders are divided into the following symptomatic groups:

- aggressive behavior, threatening health and life or bringing physical harm to other people
 - non-aggressive behavior resulting in the loss or destruction of someone else's property;
 - burglaries and thefts;
 - serious violation of law.
- 

Types of behavioral disorders

- } Oppositional defiant disorder
- } Behavioral disorder with poor socialization
- } Behavioral disorder with well socialization

Oppositional defiant disorder (ODD)

- A. Characterized by presence of at least 5 of the following symptoms for last 6 months:
1. Often loses a moderation
 2. Often argues with adults or people in authority
 3. Often actively defies or refuses to comply with adults' requests or rules
 4. Often deliberately annoys people
 5. Often blames others for his/her mistakes or misbehavior
 6. Is often touchy or easily annoyed by others
 7. Is often angry and resentful
 8. Often lies
 9. Uses vulgar and obscene words

Epidemiology

- } 2-20% children affected with ODD
- } Male : female ratio = 2-3:1
- } As frequent as ADHD in children in early primary school

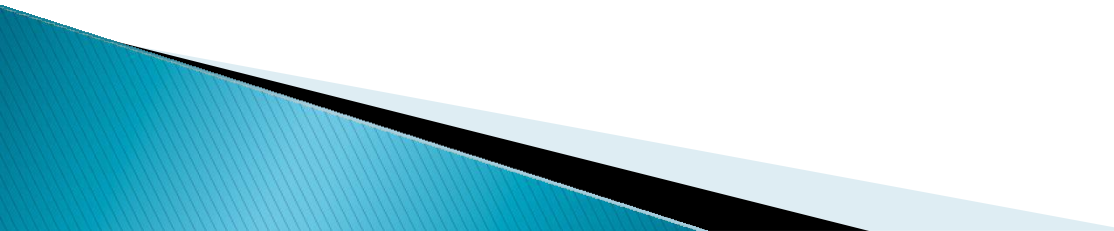
Ethiology

- the cause of such disorders is probably a combination of genetic predisposition and environmental factors,
- children with behavioral disorders often show many other, accompanying developmental disorders, e.g. the most commonly ADHD

Differential diagnosis

- } ADHD
- } Other behavioral disorders
- } Affective disorders
- } Pediatric psychosis
- } Mild intellectual disability

Behavioral problems - treatment

- Child's therapy is focused on the development and education of psychosocial skills, self-control skills and friendly ways of conducting communication,
 - developing adaptive behavior and mastering emotion control techniques, their identification skills and awareness of their sources,
 - family intervention - is to provide parents with support due to disruptions in the functioning of the system in which a child with behavioral disorders is often the weakest link,
 - help parents solve their personal problems,
 - behavioral therapy of the family
 - education of teachers
- 

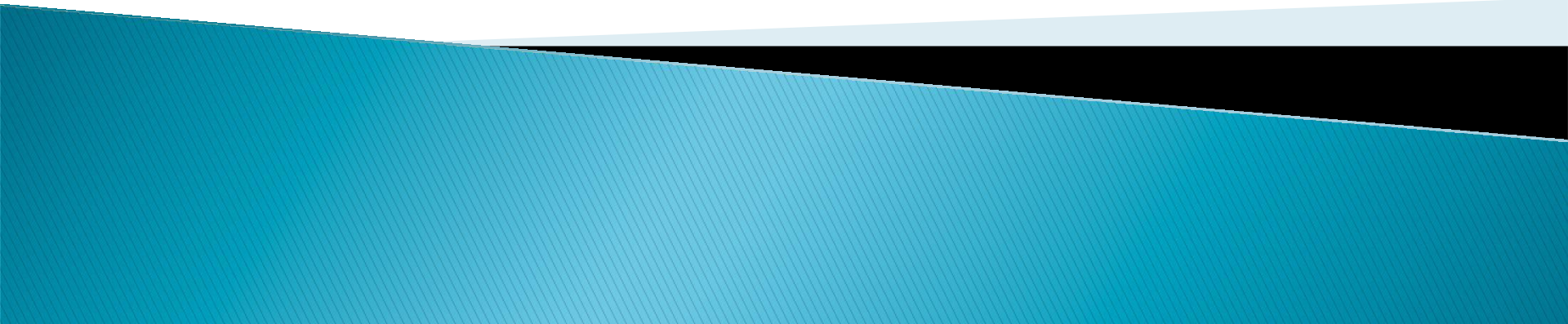
Other behavioral disorders

- Separation anxiety disorder - excessive anxiety in situations associated with real or imaginary separation from caregivers
- Disorders associated with excessive anxiety in childhood
- Excessive competition with siblings
- Selective mutism
- Disorders associated with difficulties in social contacts
- Disorders associated with excessive easiness in social contacts

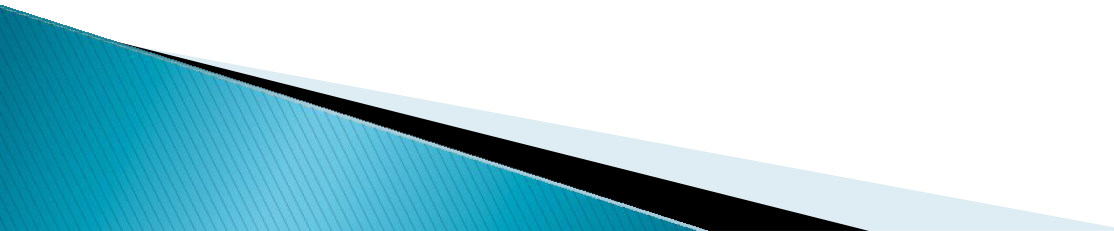
Reasons of school absence

- } Separation anxiety disorder
- } Behavioral disorders
- } Psychoactive substances abuse
- } Other psychiatric disorders
 - Affective disorders
 - Anxiety disorders
 - Psychotic disorders
- } Socio-cultural factors
- } Authentic fear of school
- } Medications' side effects – fear of stigmatization

Addictions among children and adolescents

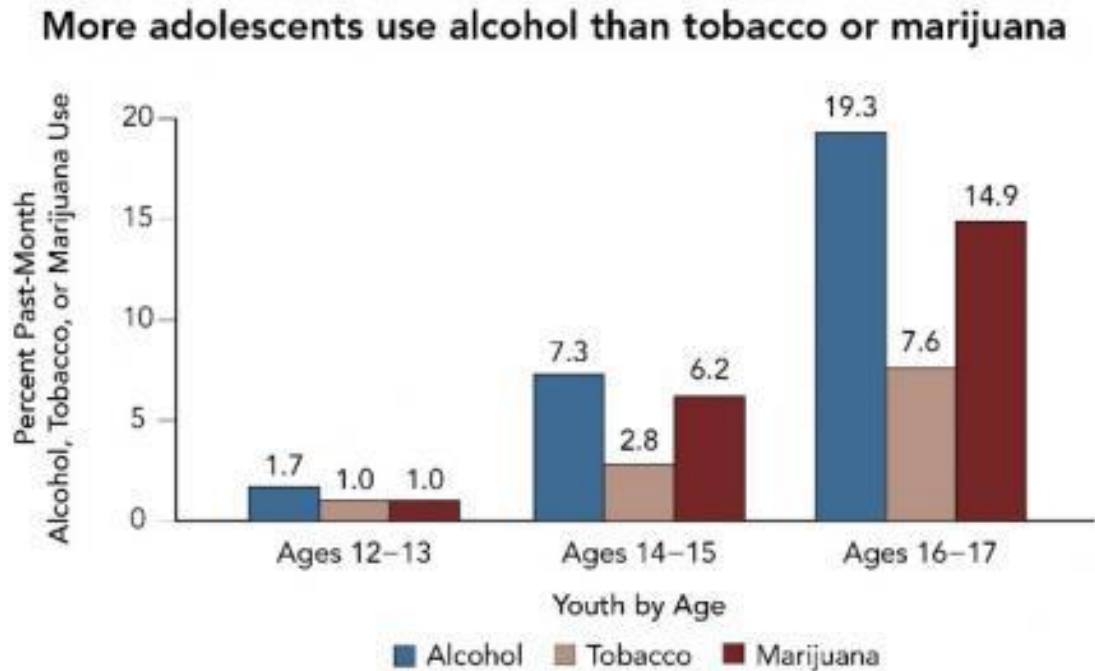


Addictions:

- persistent pursuit of taking a given substance or performing a certain activity (internal coercion),
 - performing harmful behavior despite noticeable damage caused by addiction,
 - occurrence of unpleasant mental states and physical ailments during periods of abstinence and a feeling of relief caused by taking the measure or performing activities
- 

Alcohol consumption among junior high school and high school students

People ages 12 to 20 drink 4 % of all alcohol consumed in the United States. Youth drink less often than adults do, but when they do drink, they drink more.

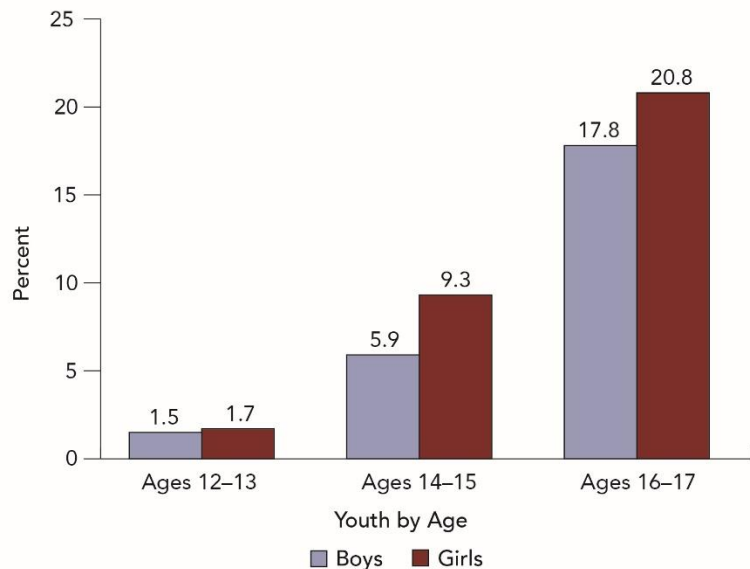


SOURCE: 2019 National Survey on Drug Use and Health. Tables 2.6B, 2.2B, and 1.7B. Accessed 10/15/20.

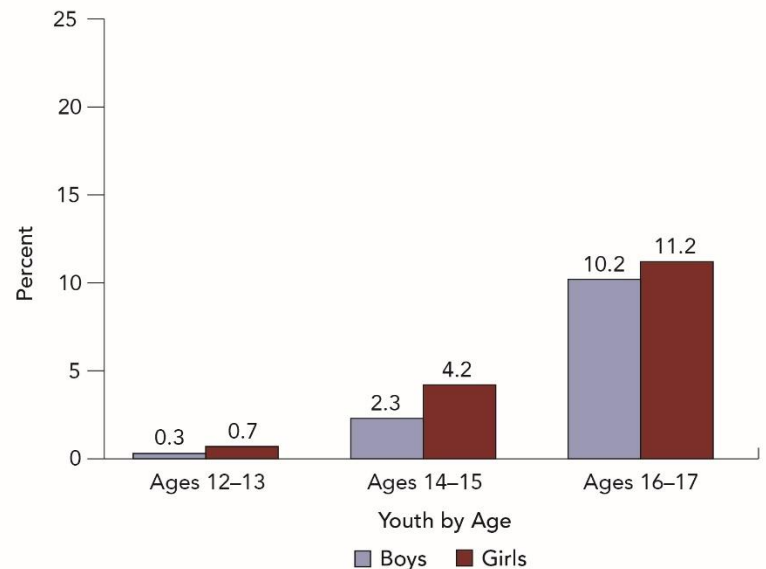
<https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking>

Historically, adolescent boys were more likely to drink and binge drink than girls. Now, that relationship has reversed.

**A Comparison of U.S. Boys and Girls:
Past-Month Alcohol Use**



**A Comparison of U.S. Boys and Girls:
Past-Month Binge Drinking**



The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines **binge drinking** as a pattern of drinking that brings blood alcohol concentration to 0.08 percent or higher. For a typical adult, this pattern corresponds to consuming 4 or more drinks (female), or 5 or more drinks (male), in about 2 hours.

<https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking>

Specification of youth alcoholism

- Rapid progression to alcohol abusing
- Significant psychiatric and neurological complications — influence of alcohol on the developing brain
- Criminogenic factor
- Less availability of special therapies and support

Parent's role in the prevention of youth alcoholism

- Talking about the dangers of drinking
- Drinking responsibly, if they choose to drink
- Serving as positive role models in general
- Not making alcohol available
- Getting to know their children's friends
- Having regular conversations about life in general
- Connecting with other parents about sending clear messages about the importance of youth not drinking alcohol
- Supervising all parties to make sure there is no alcohol
- Encouraging kids to participate in healthy and fun activities that do not involve alcohol

Drugs use among junior high school and high school students

- Junior high school (13 – 16 yo)
 - Any contact with drugs–4,1%
 - Using 1-3 times a month 0,5%
 - At the backyard – 71,4%
 - At the parties– 14,3%
- High school (16 – 18 yo)
 - Any contact with drugs–25,7%
 - Using 1-3 times a month 6,3%
 - At the backyard– 34%
 - At the parties – 38%
 - At the concerts – 8%
 - In clubs, at discos– 6%
 - At school– 8%

Circumstances of first drug use

- Junior high school (13 – 16 yo)
 - Treated by someone – 47,1%
 - Buying from a dealer – 23,5%
 - Buying from a friend – 17,6%
 - Produced by him/herself 5,9%
- High school (16 – 18 yo)
 - Treated by someone – 70%
 - Buying from a dealer – 4%
 - Buying from a friend – 13%
 - Produced by him/herself – 1%

Drugs used

- Junior high school (13 – 16 yo)
 - Marijuana – 78,6%
 - Glues – 7,1%
 - Opiates – 7,1%
- High school (16 – 18 yo)
 - The same as in junior high school

Depression

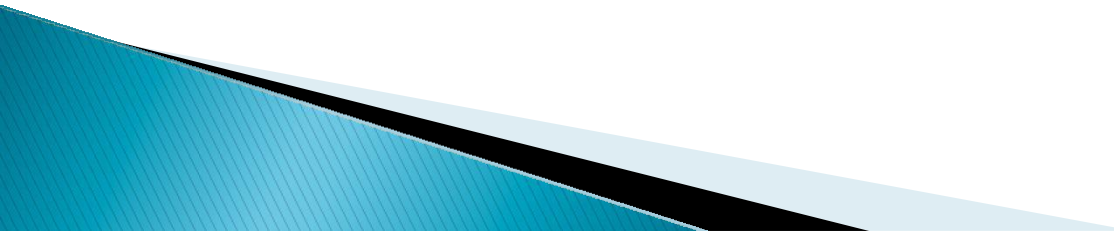
Depression - a state of long-term depressed mood with other psychological and somatic symptoms, belongs to the group of mood disorders,

- the course may be chronic, with persistent symptoms, or it may take the form of recurrent episodes of mild, moderate or severe severity, separated by periods of well-being,

- depressive symptoms often accompany other mental disorders, e.g. anxiety disorders (depression and anxiety disorders) or are a reaction to unpleasant, traumatic events (adaptive disorders, so-called depression reaction)

Deppression – symptoms:

Generally, depressed mood and no motivation to act or change. Sometimes those symptoms are so severe that they lead to self-inflicted injuries, suicidal thoughts and suicide

- Feeling sad, hopeless, or irritable a lot of the time
 - Not wanting to do, or enjoy doing, fun things
 - Showing changes in eating patterns – eating a lot more or a lot less than usual
 - Showing changes in sleep patterns – sleeping a lot more or a lot less than normal
 - Showing changes in energy – being tired and sluggish or tense and restless a lot of the time
 - Having a hard time paying attention
 - Feeling worthless, useless, or guilty
 - Showing self-injury and self-destructive behavior
- 

Differences between depression among adolescents and adults

- Incidence of depression among adolescents is as high as in adults
- About 2,5% of children suffer from depression (Merikangas et al. Dialogues Clin Neurosci. 2009)
- Some studies showed that over the time symptoms tend to occur at earlier age [Schaffer i in.-1996].
- Different male to female ratio - 1:1 in adolescents (1:2 in adults)

Specific symptoms of youth depression:

- } **Somatic symptoms:** dizziness and headache, pain of neck, extremities or stomach aches
- } **Persistent feeling of unhappiness, negativism, irritability**
- } Uncontrolled outbursts of anger or madness
- } Persistent excessive self-criticism, feeling guilty, low self-esteem
- } **Attention deficit disorder, difficulties in making decisions – manifested usually during classes**
- } Speech slowness and pauses during speaking caused by uncertainty in further sentences
- } Loss of interest in previous activities/hobbies
- } Lack of vital energy, chronic fatigue
- } Body weight fluctuations associated with appetite changes
- } Lasting worry about every little thing
- } **Excessive interest in subject of death in literature and music**

Sucides and youth depression

- } About 95% of suicide attempts in adolescents are being committed during depression period

- } 10 – 11 / 100 000 young people die by suicide

- } Suicide ratio is even 4 times higher in male than female (4:1)

- } Alarming sympoms suggesting possibility of suicide commitment:
 - Talking or even joking about suicide
 - Desire of seeing once more loved people
 - **Statements like "Life is meaningless," "Everything will be better when I will not be here," "I would rather not exist."**
 - **Interest in subject of death in literature, music or internet**
 - Writing suicide notes/goodbye letters
 - Sudden meetings with unseen for a long time friends – to say goodbye
 - Self-destructive behviors – alcohol abuse, self-injury

Thank you for your attention