Depression in Children and Adolescents

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Overview

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Epidemiology

Prevalence

Preschoolers	1%
School-aged children	2%
Adolescents	5-8%
Lifetime	15-20%

Gender

	Girls	:	Boys
Preschool & school-age:	1	:	1
Adolescents:	2	:	1

Adolescent Suicide

- Third leading cause of death in adolescents age 10-19, CDC Youth Risk Behavior Survey (Grunbaum etal. 2002)
  - 19% of high school students “seriously considered attempting suicide”
  - 15% made a specific plan
  - 8.8% reported suicide attempt
  - 2.6% made a medically serious suicide attempt

Risk Factors for Adolescent Suicide

- History of abuse
- Sexual contact against their will
- Sexual Orientation
- Gender
  - Female adolescents are more likely to plan and attempt suicide
  - Male adolescents are more likely to use lethal methods, and are more likely to complete suicide than females

Risk Factors for Adolescent Suicide (cont.)

Social stressors

- Interpersonal conflicts, legal problems
- Lack of social support/family dysfunction

Risk taking behavior

Exposure to suicide

Risk Factors for Adolescent Suicide (cont.)

Presence of a psychiatric disorder

- Mood disorders
- Disruptive disorders
- Anxious disorders
- Substance abuse disorders
- PTSD

Risk Factors for Adolescent Suicide (cont.)

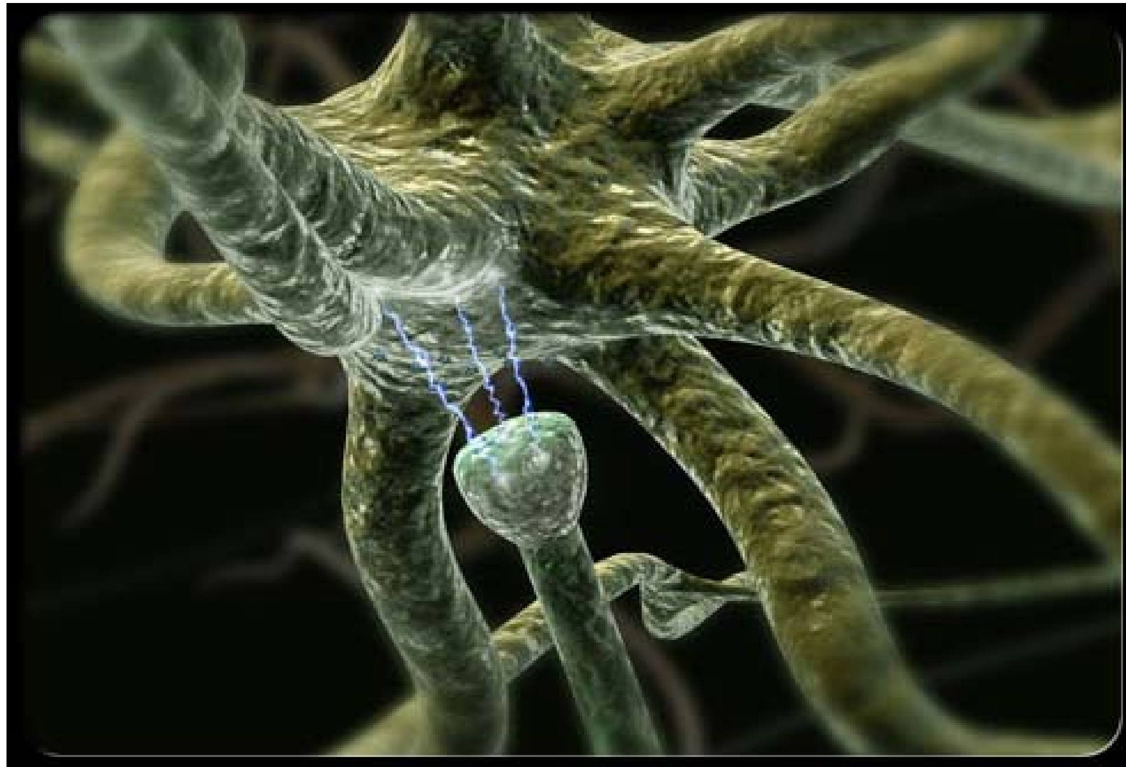
- Psychiatric disorder in parents
- Socioeconomic status
  - None or variable, but minimal
- Ethnicity
  - More common in Caucasian than African American
  - Native American – highest
  - Asian/Pacific Islanders - lowest

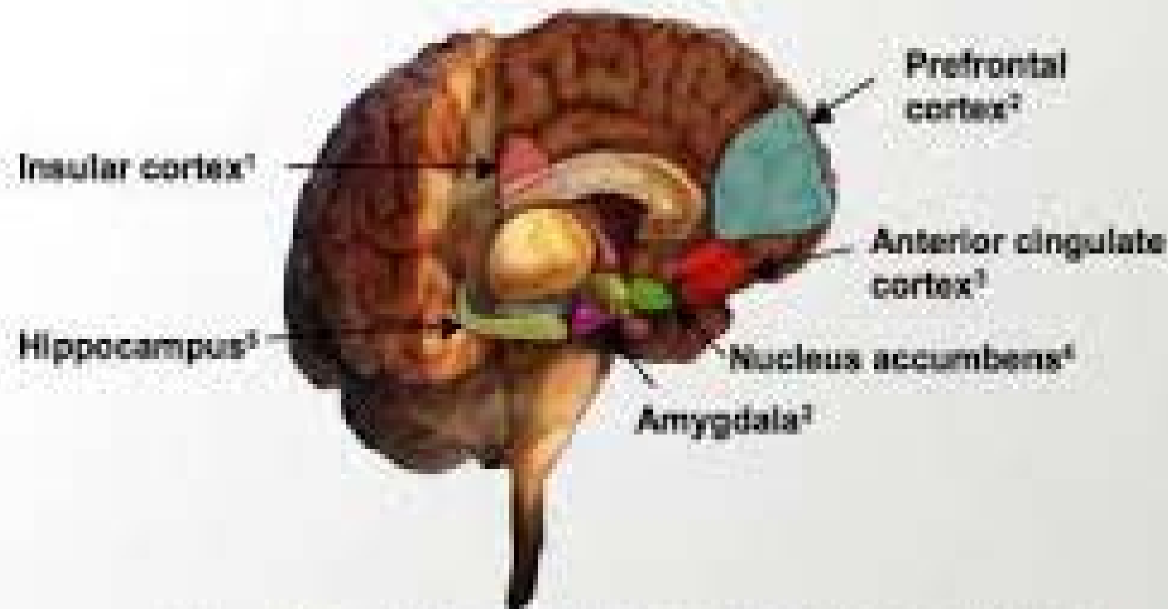
Etiology

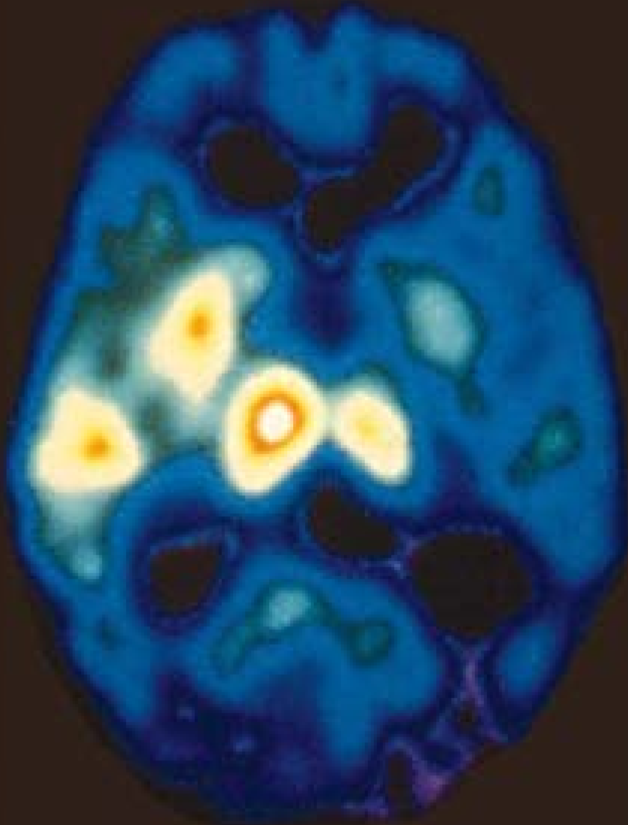
There is no evidence of a single biological, psychological, or other social explanation

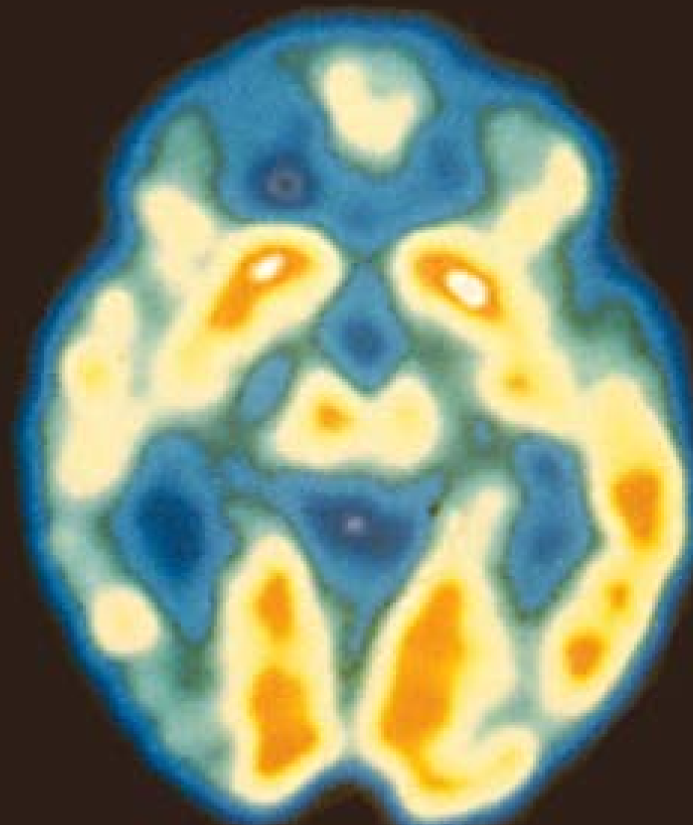
Causes of Depression

Not clear what specifically causes depression
Change in brain structure dues to changes in **neurotransmitters**




Areas of the Brain Implicated in
Major Depressive Disorder
Prefrontal cortex[2]
Insular cortex[1]
Anterior cingulate cortex[3]
Hippocampus[5]
Nucleus accumbens[4]
Amygdala[2]





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Depression Risk Factors

- Biological/Genetic

  Family history of depression
- Environmental Stressors:

  Loss, abuse, neglect, trauma, ongoing conflict and frustrations, divorce, death (family/friend)
- Medications/Medical illnesses
- Co-existing disorders (e.g., anxiety, substance abuse, ADHD, eating disorders)

Biological/Genetic Risk Factors:

- Family history of mood disorders
- Family history of anxiety, panic disorder, substance abuse, personality disorders
- Stressful environment to mother during pregnancy

  Fetal Programming Hypothesis – under stressful conditions pregnant mothers send chemical messages to the fetus to prepare it for hostile environments. (Coleman et al, 2012)

Depression Risk Factors: Environmental Stressors:

- Failure to bond in infancy
- Sexual/physical abuse
- Death or divorce of parents
- Depressed parents influences environment
- Excessive punishment/too little praise
- Inability to express anger in a healthy way
- Poor academic performance

Interaction between environment and biological factors

Trauma/Abuse:

Causes permanent changed in regulation of stress related hormones (i.e. cortisol) and neurotransmitters

Children become vulnerable to depression and stress events later in life

Risk Factors: Medications and Medical Conditions

- Thyroid
- Mononucleosis
- Diabetes
- Asthma
- Seizure medications
- Stimulants

Comorbid Conditions

- Dysthymia
- Anxiety
- Substance Abuse
- Learning Disabilities
- PTSD
- ADHD

Mood Disorders: DSM 5

- Major Depressive Disorder
- Persistent Depressive Disorder (dysthymia)

  A form of chronic depression, with symptoms less severe but longer lasting than other forms of depression. Children – 1 year.
- Depressive Disorder Not Otherwise Specified
- Adjustment Disorder with Depressed Mood
- Bipolar Disorder

Frequent sadness or crying

Does you child seem consistently sad?

Is he or she crying for

no apparent reason.

Hopelessness

Does your child seem hopeless?

Persistent low energy and boredom

Does your child seem withdrawn or timid?

Guilt and low self-esteem

Does your child seem extra sensitive?

Keep an eye out for signs of low self-esteem

Is she reluctant to try new things?

Is he easily frustrated when posed with a challenge?

"I can't do this.“

Does he make negative comments about himself?

Persistent low energy and boredom

Does your child seem withdrawn or timid?

Social isolation, poor communication

Does your child have no friends?
Is she not engaging with her peers?

Extreme sensitivity to rejection or failure

Is your child nervous?

Does she fear rejection or failure?

Does she have trouble making friends?

Is she being bullied on the play ground?

Reach out to teachers to get a better picture of your child's behavior at school

Increased irritability, anger, or hostility

- Children often act out because they haven't developed the vocabulary to talk about their low moods.
- Tantrums and yelling may be the only way they can express their feelings.
- Boys in particular may deny their feelings of sadness and may instead be moody and angry.

Difficulty with relationships

Does your child have difficulty making friends?

Is he acting up at home and around siblings?

Frequent complaints of headaches or stomachaches

Studies have linked migraines to depression in children. Headaches can be a physical manifestation of tension.

Poor performance in school

Are your child's grades slipping?

Is he having trouble paying attention in class?

Depression and ADHD share many of the same symptoms.

Not eating, trouble sleeping

Has your child lost his appetite?

Is he eating less than usual?

Spending lots of time in bed?

Having trouble getting to
bed and waking up early?.

Talk or efforts to run away from home

Has your child threatened to run away from home and packed his bags?

This may be an expression of discontent

Decreased interest in favorite activities

Does your child no longer like to watch his favorite cartoons?

Has she stopped coloring pictures?

Signs of depression in kids are usually displayed in changes to their normal behavior.

Depression – DSM 5

A. **Five (or more)** of the following symptoms for a **2-week period** and representing a change from previous functioning; **at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.**

(1) Depressed mood. ***Note: In children and adolescents, can be irritable mood.***

(2) Diminished interest or pleasure in all, or almost all, activities

(3) Appetite and weight changes

(4) Sleep pattern disruption

(5) Psychomotor agitation or retardation

(6) Fatigue or loss of energy

(7) Feelings of worthlessness or excessive or inappropriate guilt

(8) Diminished ability to think or concentrate, or indecisiveness

(9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

Depression – DSM 5 (cont)

B. The symptoms do not meet criteria for a mixed episode.

C. **The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.**

D. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).

E. The symptoms are not better accounted for by bereavement, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.

Developmental Differences

- Children do not present with same symptoms as adults. Variety of symptoms and presentations
- Clinical presentation varies by *AGE* and *DEVELOPMENTAL* stage
- Often difficult to recognize
- Important to identify early—intervention can make a difference

Infants & Toddlers

- Feeding problems/failure to thrive
- Tantrums
- Lack of playfulness and emotional expressiveness

Preschoolers

Preschool Children

- Not able to express feelings verbally
- Distinguish temperament from overt behaviors
- Apathy
- Withdrawal from caregivers
- Anger
- Irritability

Preschool Children (cont)

- Delay or regression of developmental milestones
- Clingy, whiny, separation difficulties
- Insecure
- Inhibited
- Pseudomature – worry about parents
- Sleep/appetite problems
- Suicidality

School Age Children

Latency (school age) Children

- Low self esteem
- Guilt
- Somatic complaints
- Aggression, irritable behaviors, temper tantrums
- Anxiety-school refusal, separation-anxiety
- Insomnia
- Suicidality

How to Recognize the Moods of an Adolescent

HAPPY

DEPRESSED

EXCITED

ANXIOUS

MANIC

SUICIDAL

Adolescents

- Irritable
- Angry
- Uncommunicative
- Hypersensitive to criticism
- Delinquent behavior
- Substance/alcohol abuse
- Difficult peer relationships
- Sexual identity

Adolescents (cont)

Symptoms more typical of adults

- Sad/tearful
- Hopelessness
- Guilt
- Sleep/appetite disturbance
- Apathy/ lack of interests
- Smoking
- Suicide

Comorbid Diagnosis

- Major Depression and Dysthymia (double depression)
- Conduct Disorder
- Anxiety
- ADHD
- Substance Abuse
- PTSD
- Personality Disorder

Diagnosis

Challenges:

- Symptoms are often vague and resemble other diagnoses
- Children often do not initiate help
- Need collaborative information to evaluate functioning: school, home, peers
- Parents often do not disclose information and minimize symptoms

Diagnosis

- Medical Evaluation
- Mental health clinician
- Collateral Information

  Parents

  Child

  Family

  Teachers

  Caregivers, grandparents

Diagnosis (cont)

Family history, home environment
Family psychiatric history
Developmental history/pregnancy, perinatal
Social/peer
Academic
Stressors (abuse, family, bullying)
Criminal law
Functioning, impairment

Behavioral/Assessment Tools

- Questionnaires/Rating Scales
- Children's Depression Rating Scale
- Hamilton Depression Rating Scale (adolescents)

Assess for Suicidality

Suicide Risk Factors:

- Family history
- Past suicide attempt
- Exposure to completed suicide
- Psychological characteristics – aggression, impulsivity
- Interpersonal/Family stressors
- History of abuse
- Availability of lethal weapons

Treatment

Multimodal and Collaborative

Target not only depression, but psychosocial aspects/comorbid diagnosis

Type of treatment depends on developmental stage of the child

Treatment (cont)

- Psychotherapy
  - Individual
  - Family
  - Group
- School Interventions
- Psychopharmacological Interventions
- Parental Training

Psychotherapy

Cognitive Behavioral Therapy

- The goal of cognitive behavioral therapy is to help the individual alter ways of thinking and behaving that may lead to depression.
- Starts with psychoeducation and includes self monitoring, e.g. diary keeping, challenging cognitive distortions, scheduling activities
- Negative distortions are not accurate, substitute new ways of thinking and behaving borrowing from successful behaviors (assertiveness, social skills, problem solving)

Family Therapy

- Psychoeducation
- Improve communication and problem solving
- Parent training and support

Medications

Antidepressant medications

- Medications affect the levels of serotonin and norepinephrine in the brain.
- Medications take 4 to 6 weeks to have positive effects.
- Studies show that the most effective treatment for children with depression a combination of psychotherapy and medication compared to treatment with either medication or therapy alone.

Psychopharmacology

- No FDA approval for depression in children under 7
- Fluoxetine (Prozac) is approved for FDA for treatment of depression in children 8 and older
- Escitalopram (Lexapro) for age 12 and older
- Other antidepressant medications are used off-label to treat depression in children, but are not FDA approved

Pharmacology – when to treat?

- Symptoms persist despite trials of non-medication therapies
- Severity of symptoms
- Impairment
- Past history of treatment responses
- Reliability of family and patient
- Agreement and consent of family and patient

Psychopharmacology

- Importance of concurrent psychotherapy and counseling
- Psychoeducation: parents and child
- Maturational/Development Issues
  - Preschool children: neurodevelopment
    - Few studies
    - Medication less effective
    - Increased susceptibility to side effects
- Collaboration: parents, teachers, mental health specialists

Management of medication

- Start low and go slow
- Regularly scheduled follow-up visits
- Assess suicidality
- Assessment of efficacy
- Managing side effects
- Length of time to continue medications- decision when to taper and D/C

Prognosis

Depressed children

- More likely to have depression in adulthood
- More vulnerable to other problems
  - Personality disorder
  - Substance abuse
  - Anxiety

Prognosis

Early Intervention and Treatment make a difference!

Untreated depression leads to increase risk of:

- Poor self esteem
- Poor social skills
- Increased risk taking
- Smoking
- Early pregnancy
- Decreased functioning
- Sub clinical depression

Prevention

- Better understanding to be able to identify children with depression:
  - School staff
  - Mental health professionals
  - Primary care providers
- Identify pregnant mothers who are at high risk for depression
- Identify parents who are depressed

Resources

Books	
	Child and Adolescent Mental Health. Kay, D., Montgomery M., Munson S., 2002. Lippincott Williams & Wilkins, Phil., PA

Resources

Web Sites	
	About Our Kids. Extensive information about child mental health issues for parents, children, and professionals. Sponsored by New York University Child Study Center. www.aboutourkids.org/index.html.
	American Academy of Child and Adolescent Psychiatry. Excellent resource for information regarding psychiatric disorders, their assessment, and their treatment in pediatric populations. Large series of one-page handouts for parents (Facts for Families) on a wide variety of issues. Available at http://www.aacap.org.

Resources

Web Sites	
	American Psychological Association. Interesting articles pertaining to children and current psychological research. Available at http://www.apa.org/psychnet/children.html.
	Internet MentalHealth. Large web site with information regarding diagnosis, treatment and research on various mental health conditions (adult and child focused). Available at http://www.mentalhealth.com.

Resources

Web Sites	
	KidsHealth. Good general Web site for parents with specific information regarding behavior, emotions, and development. The site has specific areas for children and adolescents, with good articles pertaining to mental health issues. Available at http://www.kidshealth.org.
	Mental Help Net. Another overview of mental health issues for both patients and professionals. Available at http://www.mentalhelp.net.

Resources

Web Sites	
	Pediatric Development and Behavior. Excellent resource for a variety of developmental and behavioral issues with educational information for physicians, parents, nurse practitioners, and nursing staff. Available at http://www.dbpeds.org.
	www.mentalhealth.samhsa.gov. Government website with overview of mental health issues for both patients and professionals and updated information articles.