

Adolescent Development

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Adolescent Development

Puberty

A. Period between childhood and adulthood when a person's body undergoes hormonal, physical and emotional changes.

1. **Hormonal changes**

- a. Hypothalamus-releases a hormone which flows through a special system of blood vessels to the pituitary gland.
- b. Pituitary gland-sends hormones to the sex glands, testicles in the male and ovaries in the female. These hormonal messages tell the sex organs to start producing sex hormones.
- c. Sex hormones-female, estrogen and progesterone; male, testosterone.
1) these hormones are responsible for the physical and emotional changes that will take place.

2. **Age of puberty**

- a. Usually two years earlier in females than males.
- b. The age of puberty varies from person to person.
- c. Male - puberty can begin around ages 10-13; completed by age 16- 18. Female - can begin around ages 8-12; completed by age 15-16.

B. **Physical changes**

1. **Similarities in males and females**

- a. Voice changes - caused by lengthening of the vocal cords.
1) although this happens to both males and females it is more noticeable in males.
- b. Sweat glands become more active
- c. Acne may become a problem
- d. Rapid changes in height and weight
1) this can cause awkwardness because of imbalance in body proportion - clumsy.
- e. Growth in body hair
- f. Reproductive organs begin to function - now capable of producing babies.

- g. Some people start this process sooner and grow faster than others.
- h. Growing pains - aching muscles and joints
- i. Mood changes.
- j. Feelings of independence
- k. Interests in friends change.

2. Sexual feelings

- a. Male and females will become more aware of physical sexual feelings.
 - 1) these are normal
- b. Masturbation
 - 1) Touching yourself for pleasure
 - 2) It is normal to masturbate, just as it is normal not to.
 - 3) Masturbation does not cause you to go blind, grow hair on your knuckles, or anything else that is damaging.
 - 4) It is a way to discover your own body.
 - 5) It is a way of providing a sexual release.
 - 6) People have different values regarding masturbation.
 - 7) It is only wrong if it is wrong for you.
 - a) If you don't like touching yourself don't force yourself to do so.

C. Changes in males

- 1. General
 - a. First sign of puberty is usually development of the testicles and scrotum.
 - 1) skin of scrotum reddens and wrinkles
 - 2) penis grows
 - b. Testosterone is being produced
 - c. Pubic hair appears
 - d. Body growth
 - 1) shoulders broader
 - 2) muscles develop
 - e. Facial hair and underarm hair
 - 1) about 2 years after pubic hair
 - f. Some males may notice a slight swelling and tenderness in the breasts.
 - 1) this will go away as hormones balance.

2. Sperm production and semen

a. Microscopic male reproductive cells.

b. Have head and tail resembles a tadpole.

c. Sperm contain the chromosome determine the sex of the fetus x-female or y-male.

d. Sperm production begins about age 12

e. First ejaculation may not occur for a year.

f. Sperm are produced in the testicles and mature in the epididymis usually takes 30 days.

g. Semen

1) contains sperm and fluids from the prostate, Cowper's gland, and seminal vesicles.

2) only a very small portion of semen are actually sperm

3) semen may be clear in young boys because of low sperm count

4) regardless of color of semen boys are still capable of causing pregnancy.

5) the average ejaculation contains 200-500 million sperm.

6) sperm can live in the female body during the time of ovulation for about 3-5 day.

3. Erection and ejaculation

a. Erection

1) when a male becomes sexually excited his penis which is usually soft and limp, swells and becomes larger and erect.

2) caused when veins in the penis fill with blood, this causes the penis to become firm.

3) the penis gets longer, harder, and wider.

4) it stands erect away from a male's body.

5) the muscle at the base of the penis tightens so that this extra blood cannot easily drain out.

6) there is no bone inside the penis

7) many things can cause an erection

a) thoughts of sex

b) pictures of females, movies, etc.

c) friction in a male's pants

d) sometimes having to urinate

e) many males wake up with erections, hormones cause men to have erections every 90 minutes while sleeping.

f) mostly erections come with sexual arousal, being touched, sexy thoughts, reading sexy material, day

dreaming about sex

g) spontaneous erection - a erection that seems to happen even without emotional or physical stimulation - these happen because of fluctuating hormone levels in boys.

8) there is no such thing as too many erections

b. Ejaculation

1) when a man has a climax during sexual activity, semen is released (spurts) out the erect penis.

2) muscles in the base of the penis which contract and expel semen

3) nocturnal emissions "wet dreams"

a) erection of the penis and ejaculation during sleep

b) related to the individual's level of sexual awareness and interest. Usually triggered by sexual dreams and fantasies

c) occurs most frequently in males who are not engaging in masturbation or sexual intercourse.

D. Changes in females

1. General

a. usually the first sign is rapid growth in body.

1) hips get bigger

2) pelvis is wider

b. ovaries start producing hormone estrogen

c. hair grows under arms, on genitals, leg hair gets thicker

2. Breast development - mostly fatty tissue with milk producing glands

a. usually starts after beginning of spurt

b. development begins with swelling of the nipples.

c. breasts gradually fill out over a period of 3-4 years.

d. in early development, breasts may feel tender and sensitive

e. one breast may grow faster, but this usually evens out. Although one may stay slightly larger .

f. sometimes a small amount of milky fluid is secreted from the nipples.

g. breast size varies with each person

3. Ovulation

- a. around each month, an ovum (egg cell) matures and ripens
- b. at the same time, the lining of the uterus (endometrium) builds up in preparation for a fertilized egg.
- c. the ovum take a seven to ten day trip down the fallopian tube into the uterus. Occasionally, two or more ovum are released at the same time.
- d. if the egg is not fertilized, the uterus will know that the endometrium is not needed and menstruation begins 14 days after ovulation.

4. Menstruation

- a. when the lining of the uterus (endometrium) begins to slough off the walls and slowly passes out of the body through the vagina
- b. Usually begins between ages 9 and 16, and is normal to begin earlier or later
- c. Ovulation may occur before the first menstrual period starts and therefore a girl can get pregnant before her period starts if sexual intercourse or ejaculation near the vaginal opening occurs
- d. the menstrual flow is quite slow and gradual. The first sign of discharge may be small not a "gush".
- e. first periods may be irregular, skipping a month.
- f. gradually a regular cycle will be established
- g. periods may last 3-7 days, but this also varies.
- h. menstruation is a normal part of growing up
- i. first day of menstrual cycle begins with bleeding.
- j. menstrual cycles usually lasts 26-34 days, shorter or longer cycles are also normal.
- k. many girls experience cramping during their period
 - 1) mild cramping is due to contractions of the uterus helping to shed the lining.
- l. other problems may be headaches, backaches, or nausea.
 - 1) these problems may be lessened by mental attitude, exercise, nutrition, and sometimes medications can be

taken.

m. attitudes toward menstruation

- 1) many girls are embarrassed
- 2) they feel everyone knows
- 3) menstruation is viewed as "dirty"

n. special needs during menstrual period

- 1) sanitary napkins
- 2) tampons
- 3) hygiene

o. changes in physical and normal activities

- 1) for most females, no changes need to be made.

E. Emotional changes in males and females

1. Thought of sex and sexual attraction

a. increased hormone production prompts sexual thoughts, daydreams, heighten awareness of sexual attraction - in most young people.

b. sexual fantasies are common.

c. an increase attraction to opposite or same sex.

2. Mood shifts

a. many mood shifts are common

- 1) being happy one moment and angry or sad the next.

- 2) crying over seemingly small matters is not uncommon in girls or boys.

b. sharing feelings with friends, parents, or siblings can help.

c. most young people are comforted to know that others are also feeling the same way.

3. Body image

a. discomfort and concern about changes in their bodies may be a source of emotional stress.

b. because people are different and develop at different times, it can be confusing and embarrassing to be the first or last to develop.

c. body development may cause you to become awkward and clumsy; this can cause you to feel self-conscious.

4. Relationships with friends

- a. friendships and interests change
- b. friends become more important
- c. development of close or "best" friends may change.
- d. relationships with the opposite sex change
 - 1) platonic
 - 2) boy/girlfriend
 - 3) may feel awkward or shy around the opposite sex
- e. feeling lonely at times is also common

5. Relationship with parents

- a. you are changing physically and mentally. Your needs for your parents change.
- b. you want to be more independent and to be treated like an adult.
- c. your parents are learning to deal with this changing person.
- d. conflicts can arise yet are usually easily resolved.
- e. you may be relying more on your friends than parents.

DEVELOPMENTAL TASKS OF ADOLESCENT GROWTH

Independence

- become less dependant on parents
- shifts from parents to peers
- may become rebellious
- may shift from feeling mature and wanting to be treated like an adult to acting like a dependent child.

Identity

- trying to define who you are.
- process may involve experimenting
- development of sex role identity, positive body image and sense of self-esteem and competence

Intimacy

- preparation for loving relationship
- learning to express and manage emotions
- developing the capacity to love and be loved and to be intimate in relationships with others.

Integrity

- development of own values
- values are based on parent's values, peers, school, media etc.

Intellect

- abilities to think abstractly
- becoming capable of conceptual thinking and of understanding logic and deductive reasoning.
- may be idealistic
- have a feeling of "knowing everything"

CHARACTERISTICS OF GROWTH AND DEVELOPMENT BY AGE GROUPING

AGES 9-10 (pre-adolescent)

PHYSICAL

- Physical development varies with individuals. Girls may already be showing signs of puberty, growth spurts, breast buds developing. Others may still be very much child like.
- Very active, increased development of motor skills, may be hyper after physical activities.
- Boys may be physical with each other, wrestling and fighting.

EMOTIONAL

- Increasing ability to take on more responsibility, becoming more dependable.
- May be quick tempered, quick flare-ups, but these are short lived.
- Easily embarrassed if criticized
- Needs more personal space, and privacy
- Ability to empathize
- Displays a variety of emotion, from one extreme to another.

SOCIAL/COGNITIVE

- A loyal and devoted friend.
- Admires members of same gender, similar or older age.
- Increase outside social activity, less chosen family time.
- Can be rewarded with praise and affection.
- Increase in verbal criticism of the opposite sex.
- Attraction exists without contact, or may try gaining conquests such as a kiss.
- Enjoys group play and organized activities.
- Often afraid of failing and is ashamed of having failed

AGES 10-11 (pre-adolescent)

PHYSICAL

- Boys may begin showing signs of puberty, rapid growth, growth of penis and testicles.
- Girls may be close to first menses.
- The physical growth during this time is very much dependent upon their hormonal development.

EMOTIONAL

- Direct matter of fact, generally easy going
- One of the happiest ages
- Proud
- Don't like to be made fun of.
- Impulsive
- One of the least tearful ages

SOCIAL/COGNITIVE

- Critical of those younger
- Hero worship, of those who are real to them and those who are famous
- Devoted to parents
- Sociable
- Girls must have best friend, often several. Relationships among these friends extremely complex and intense, extremes of liking and hating each other. Possessive, jealousy of friendships, cliquey, secretive
- Boys may have one or two best friends. Others have a gang whom they like equally. More cohesive friendships than girls.
- May be starting to developing intimate feeling towards opposite sex, fickle.

AGES 12 – 13 (early adolescent)

PHYSICAL

- Physical development varies with individuals
- Females reach puberty around age 12, two years earlier than males.
- Rapid growth results; awkwardness, and self consciousness.
- Males concern with physical development, especially if small.
- Females concerns with development of breasts, and menstruation (especially if first or last).
- Deepening of voice, more noticeable in males.

EMOTIONAL

- Restless and moody
- Need attention; act out to get noticed
- Parents still main influence, yet aware they are not perfect
- Spend time day dreaming
- Very self-centered
- Seeking and demonstrating independence
- Need physical contact; girls - hugging, holding hands with other females; males - Roughhousing, tackling and punching.

SOCIAL/COGNITIVE

- Identification with same sex role models (parents, teachers, peers)
- Some females may still behave like a "tomboy".
- Interested in how things work
- Increasing values regarding; the world, people, events, moving beyond own family
- Increasing difficulties with family; picking on younger and annoying older siblings.
- Short attention span
- Becoming aware and concerned about what other people think
- Need to fit in with peers; behaviors, clothing, language
- Need to show they are independent
- Increasing peer contact; changing friendships
- Mutual exploration of same gender body
- Put off tasks, procrastinate
- Draw conclusions from what they see

AGES 13 – 14 (early adolescent)

PHYSICAL

- Continued development of puberty
- Skeletal system growing faster than muscular system often resulting in awkwardness and clumsiness.
- Greatest stage of physical development
- Very self-conscious about body image, friendships, peer acceptance
- Increased appetite
- Development of pubic and underarm hair

EMOTIONAL

- Development of identity
- Increasing awareness of how they compare with peers
- Strong mood swings, pouting, sulking, girls "cry for no reason"
- Increased sexual feelings
- Males may masturbate frequently, may have guilt feelings
- Ambivalence regarding independence from parents, family'
- Mouthy, belligerent

SOCIAL/COGNITIVE

- Experimentation, risk-taking
- Increased interest in relationships

MALES

- Preoccupied with sex; like talking about it, curious
- Increased interest in peers
- Activities and games become more sophisticated
- Continued same gender body exploration
- Separation from mother

FEMALES

- Easily embarrassed by parents, avoid parent peer contact
- Seek out substitute "mother"
- Increased fascination with older males, "crushes"

AGE 15 (middle adolescent)

PHYSICAL

- Slowing growth rate
- Peers physical differences even out
- Basic body build fairly well established

EMOTIONAL

- More easily confused emotionally, battling with right and wrong, feelings vs values
- Very rebellious, make an issue out of everything
- Strong independence away from parents, see parents as intrusion to their life
- Developing negative feeling about family members
- Friends greatest influence
- Want to fit in, need for peer acceptance very high

SOCIAL/COGNITIVE

- Much experiencing with peers
- Great interested in opposite sex
- Females strongly seeking out relationships
- Experimenting with relationships
- Need to dress like peers
- Resent adult interference in any activities
- Increasing abilities for cognitive reasoning
- Begin to think and plan about their future
- Most of time spent with peers, males - hanging out together, females - talking

AGES 16 – 17 (middle adolescent)

PHYSICAL

- Body growth evens out; parts catch up and develop together
- Females reach adult height about age 16, males about age 18
- May be nervously overactive

EMOTIONAL

- Reducing rebellious tendencies
- Increase need for flexibility and freedom in rules
- More independent, gaining stability in personality
- Peer group less influential
- Making own choices, developing own values
- More settled down
- Self reflection, introspective, self evaluating
- More future oriented
- Showing signs of maturity, acting more grown up
- Recognizing value of family
- More accepting of parents, relationships smoothing out
- Frequently feel insecure

SOCIAL/COGNITIVE

- "Rite of passage" - get drivers license, independence
- Accepting of variety of peer values
- Solid relationships develop
- Enjoy social activities with peers
- May change friendships, peer influence
- Interests become more narrow yet more in depth
- Become more creative, imaginative, philosophical

Emotional Development/Emotional Changes

- Entering adolescence can be described in a sentence - simultaneous emotions of delight, energy, excitement, anticipation, insecurity, irritability, impulsiveness, moodiness, supersensitive, imaginative, secretive..truly a unique time in the child's development.
- Shift of thinking from operational, guided by factual information; to operational level of thinking about what might be possible.
- Adolescents are now entering an age of identity crisis, new issues about sexuality, extensive education on the topic of sex, peer pressure toward drugs and alcohol, and how to make it through adolescence safely.
- Teens age 10-14 are experiencing more freedom, autonomy, and choice than ever at a time when they still need special nurturing, protection, and guidance.
- Without the sustained involvement of parents and other adults in safeguarding their welfare, young adolescents are at risk of harming themselves and others.
- Many adolescent manage to negotiate their way through this critical transition with relative success. With caring families, good schools, and supportive community institutions, they grow up reasonable well educated, committed to families and friends, and prepared for the workplace and for the responsibilities of citizenship.
- Under less-than-optimal conditions for growth and development--the absence of supportive and caring adults, poverty, unsafe schools, and distressed communities--adolescents can become contributing members of society.
- For many others, however, the obstacles in their path can impair their physical and emotional health, destroy their motivation and ability to succeed in school and jobs, and damage their personal relationships. Many reach adulthood ill-equipped to participate responsibly in our democratic society.

Early Adolescence

Girls ages 11 – 13, Boys ages 12 – 14

Identity:

- Puberty changes: body anxiety is high. (Am I normal)
- Sense of loss of control
- Family and parents are important
- Peers are beginning to become important. (I want to belong)
- Roles models and heroes are important

Intellect (Cognitive Development)

- Concrete thinking: very literal, very “black and white”
- The world is “here and now:” unable to think into the future
- Understanding events or problems in terms of direct experiences.
- Egocentric: Imaginary audiences (“Everyone is looking at me”)

Independence:

- Still dependent on adults, but some pulling away begins.
- Complaints about lack of privacy, wants time with friends away from parents
- Basically accept parental guidance, but start to test adult authority.
- Fluctuates between cling to adults and rebelling against them
- Moodiness
- Improved abilities to use speech to express oneself

Intimacy, Relationships, Sexuality

- Same-sex friends are strong: ‘best friends’ and cliques develop
- Same-sex sex play is common: does not indicate sexual orientation
- Focus is usually not on sex: more interested in on activities and teen heartthrobs.
- Less affection shown to parents, with occasional rudeness
- Search for new people to love in addition to parents
- Tendency to return to childish behavior, fought off by excessive activity
- Peer group influences interests and clothing styles.
- May be becoming aware of sexual orientation, yet not acting on it
- Shyness, blushing and modesty
- Experimentation with body (masturbation)

Integrity (Values)

- Own values not yet defined
- Right and wrong is very black and white: no gray areas
- Internal control not developed: clear limits and boundaries are necessary.
- There is a mystery about being “grown-up”
- Begin to question rules and beliefs previously accepted at face value.

Adapted from materials by Wayne Pawlowski, Planned Parenthood Federation of America and American Academy of Child Psychiatry

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Middle Adolescence

Girls: ages 13 – 16, Boys ages 14 – 17

Identity

- Identity changes day-to-day, friend-to-friend, group-to-group
- Physical changes are in full swing: concerned about being attractive
- Concern for what it means to be male or female in their culture
- May hold rigid sex-role stereotypes or may completely rebel against sex roles
- Being like everyone else is very important.
- Peers define who you are, what you do, what is “cool”
- Parents are uncool and an embarrassment
- Self-involvement, alternating between unrealistically high expectations and poor self concept
- Feelings of strangeness about one’s self and body
- Development of ideals and selection of role models

Intellect (Cognitive Development)

- Flashes of abstract thinking: begin making connections between present and future
- Under stress, revert to concrete thinking
- Increased intellectual curiosity, ability and creativity
- Idealistic thinking
- Egocentric: Personal Fable (“I am unique: no one has experienced this before”)
- Omnipotent, Omniscient, and Immortal: all powerful, all knowing, invulnerable

Independence

- Conflicted About parental concern/control (Leave me alone!/Don’t leave me alone)
- Classic rebellion against and conflict with family
- Experimentation: trying adult behaviors
- Drive for emancipation: power struggle with adults in authority

Intimacy, Relationships, Sexuality

- Intense friendships: telephone conversations that last for hours
- Intense sexual feelings
- Dating begins and love object becomes primary focus
- Sexual experience for some
- Discomfort with sexuality is common
- Complaints that parents interfere with independence
- Concerns about sexual attractiveness
- Frequently changing relationships, exploring new friendships
- Feelings of love and passion
- Movement towards heterosexuality with fears of homosexuality
- Greater awareness of sexual orientation

Integrity (Values)

- Developing and testing own values
- Reject parental values to test out own (My parents can’t do anything right)

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Late Adolescents

Girls ages 16 – 19..., Boys ages 17 – 19...

Identity

- Physical changes leveling off and ending: less confusion
- Greater sense of self control
- Better, more realistic sense of self and how one compares to others
- Search for identity is less influenced by peers: more self-identified
- Arriving at concept of self as an adult: need to accept that self
- Peers are important but more able to resist peer pressure
- Establishment of sexual identity

Intellect (Cognitive Development)

- Adult thinking: ability to think abstractly has developed in most
- Future goals more clearly and realistically defined
- Idealistic
- Able to link consequences to behavior
- Realization of own limitation and mortality
- Ability to express feelings in words
- Greater emotional stability
- Ability to compromise
- Ability to delay gratification

Independence

- Self sufficiency begins (car, job, etc)
- Separation from parents complete (psychologically if not physically)
- Family tensions decrease
- Establish new, adult relationship with parents

Intimacy, Relationships, Sexuality

- Partnering more realistic and less changeable
- 'Real relationships' with emotional intimacy are possible
- Peer group membership is important but one-on-one relationships primary
- Movement from egocentrism to mutuality and real sharing
- Satisfaction of other(s) can be as important as satisfaction of self
- Sexual behavior more prominent: majority of teens initiate intercourse during this stage
- Clear sexual identity

Integrity (Value)

- Refining and clarifying of values: large swings and inconsistencies less common
- May return to family's values
- Conscience is more fully developed: internal controls based on moral principles

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