Adolescent Growth and Development

Lecture 10
What is ADOLESCENCE?

13 – 19 Years

“Adolescence is that period of life of an individual when …."

“Society no longer views you as a child but does not recognize you as an adult”
“Transition between childhood and adulthood”
“Physically begins with puberty”

Teen Age is .... ThirTEEN to NineTEEN Years of Age
Common adolescent Concerns of Body image

- Anxious about appearance
  - How do I look?
  - Am I normal?
  - Can I become more beautiful /Smart?
  - Are Food supplements needed for body building
  - Height increase measures
  - Cosmetic surgery
Is my height NORMAL?

• Know your height potential
  – (Mother’s Height + Father’s Height)/2
  – Add 6.5 cm in Boys
  – Minus 6.5 cm in Girls
  – This gives Target Height as an Adult
    • ± 7.5 cm for Boys
    • ± 6 cm for Girls
    • Gaining of 25% of final height (27-29 cm in boys & 24-26 in girls);
Physical Development

- Puberty
  - Rapid skeletal and sexual maturation
  - Occurs two years earlier for girls than for boys

  **Begins at**
  - 10 (range 8-13) in Girls
  - 12 (range 10-15) in Boys

  **Duration** 3-3.5 (2-6) Yrs.

- Testosterone (boys)
  - Genital development, height, voice changes

- Estrogen (girls)
  - Breast, uterine, and skeletal development
Physical and Sexual Development

- Puberty – tends to follow a predictable sequence for each sex

1. **Internally**, puberty involves the development of the **primary sex characteristics**
   - The sexual organs that are directly involved in reproduction, such as the female’s uterus and the male’s testes

2. **Externally**, puberty involves the development of the **secondary sex characteristics**
   - Characteristics not directly involved in reproduction, but still signal sexual maturity
   - Such as changes in height, weight, and body shape, appearance of body hair, voice changes, and in girls, breast development
Sequence of pubertal events in girls

- Growth **fat mass greater; Hips rounding out & widen.**
- Skin becomes **oily**
- All permanent teeth erupt (Second & third molars)
- Increased perspiration

- **Thelarche**- Breast development
- **Pubarche**- Genital hair
- **Menarche**- Menstruation begins
Sequence of pubertal events in boys

- Growth Muscle mass greater; Shoulders widen
- Skin becomes oily
- All permanent teeth erupt
- Increased Perspiration

- Pubarche-Genital hair
- Mustache-facial hair growth
- Testes & Penis increases in size
- Larynx enlarges, voice deepens
- Nocturnal Emissions- spontaneous erections & ejaculation occurs at night (wet dreams)
Early indicators of puberty

• Increase in foot size (Shoe size changes)

• Trouser size – looking short now

• Clothes size – needs bigger clothes
Influences on Timing of Puberty

**Genetics**
- Girls experience menarche around the same time as their mother,
- Body size and physical activity

**Environment**
- Nutrition and health
- Absence of the father in the home environment (menarche earlier for girls in these homes)
- Quality of family relationships
When should you worry about the changes?

**When Pubertal physical changes are Early**

- Breast development before 8 years of age
- Menarche before 10 years of age
- Enlarging testicles before 9 years of age

**When NO signs of puberty are there - Delayed**

- 13 years in girls
- 14 years in boys
Early vs. Late Maturation

- **Early maturing girls** have a less positive body image; more likely to drink, smoke, be depressed, have an eating disorder or mental disorder, have sex earlier, and have lower educational and occupational attainment.

- **Early maturing boys** are leaders, athletes; have a more positive self-image in their 30s.

- Early maturers, both sexes are **emotionally stressed**, show academic declines.
How Do These Changes Affect Teens?

- Concern if not physically developing at same rate as peers - need to “fit” in (early vs. late maturation)

- Feel awkward about showing affection to opposite sex

- Ask more direct questions about sex - trying to figure out values around sex
Common Health Problems of an Adolescent

Poor Posture

Many adolescents demonstrate poor posture, a tendency to round shoulders and a shambling, slouchy walk. This is due in part to the imbalance of growth, the skeletal system growing a little more rapidly than the muscles attached to it.

Poor posture particularly seems to develop in adolescents who reach adult height before their peers. They slouch to appear no taller than anyone around them.

Girls, especially, may slouch to diminish the appearance of their breast size if they are developing more rapidly than their friends.

This also can occur from carrying backpacks that are too heavy.
Acne

- Acne is a self-limiting inflammatory disease that involves the sebaceous glands that empty into hair shafts, mainly of the face and shoulders.

- It is the most common skin disorder of adolescence, occurring slightly more frequently in boys than girls. The peak age for the lesions to occur in girls is 14 to 17 years; for boys, 16 to 19 years.

- Cigarette smoking may also increase the number of inflammatory lesions.
Menstrual Irregularities

Menstrual irregularities can be a major health concern of adolescent girls as they learn to adjust to their individual body cycles.

Dysmenorrhea is painful menstruation. It was thought to be mainly psychological, needing no treatment other than reassurance that it was a normal phenomenon and something women should endure.

Today, it is known that the pain is caused by the release of prostaglandins in response to tissue destruction during the ischemic phase of the menstrual cycle. Prostaglandin release causes smooth muscle contraction in the uterus.

Dysmenorrhea can also be a symptom of an underlying illness such as PID, uterine myomas (tumors), or endometriosis (abnormal formation of endometrial tissue).
Management of dysmenorrheal

- Warm bath
- Heating pads applied to abdomen
- Exercise
- Mild analgesic
- Diuretics to relieve fluid retention
- Psychotherapy
Pre menstrual syndrome: immediately preceding menstruation as:

- Nervous tension
- Depression
- Irritability
- Leg pain
- Depression
- Anxiety
- Headache
- Tender abdomen and breast

These symptom lead to poor achievement in school & emotional upset
Eating Disorders

- Often develop from an excessive concern for appearance

  **Body dysmorphic disorder**: dissatisfaction with perceived body shape lead to:

  - *Anorexia nervosa*: persistent refusal to eat and irrational fear of being overweight **or**
  - *Bulimia*: uncontrolled eating and purging (self-inducing vomiting).

- More common in females
- Usually, psychological or psychiatric help is needed to treat these conditions
WHAT CAN ADULTS DO?

- Avoid criticizing/comparing to others
- Encourage enough sleep
- Encourage/model healthy eating
- Encourage/model activity
- Provide honest answers about sex
According to Jean Piaget, adolescents are in the formal operational stage. They use this reasoning to:

- think about how reality compares to ideals.
- think hypothetically about different choices and their consequences.
- plan how to pursue goals.
- think about the minds of others, including “what do they think of me?”
Adolescence

Adolescent egocentrism

- **Imaginary audience** – everyone is watching
- **Personal fable** – belief that s/he is unique
- **Hypocrisy** – okay for one to do it but not another
- **Pseudostupidity** – use of oversimplified logic
How Do These Changes Affect Teens?

- Heightened self-consciousness
- Believes no one else has experienced feelings/emotions
- Tend to become cause-oriented
- Tend to exhibit a “justice orientation”
- “It can’t happen to me” syndrome
Emotional Development

Erikson: Identity versus Role Confusion

- Identity: For adolescents; problems answering, “Who am I?”
- Role Confusion: Occurs when adolescents are unsure of where they are going and who they are; Where do I belong?

The four main areas in which adolescents must make gains to achieve a sense of identity

- Accepting their changed body image
- Establishing a value system or what kind of person they want to be
- Making a career decision
- Becoming uncontrolled by their parents

If young people do not achieve a sense of identity, they develop a sense of role confusion
How Do These Changes Affect Teens?

Rebellion, replay of phallic issues (rebellion is more emotionally changed than acts such as staying out late or wearing clothing other than those approved by parents, because it is not only harmful but also illegal).
Body Piercing and Tattoos

- Body piercing and tattoos are becoming a mark of adolescence. Both sexes have ears, lips, chins, navels, and breasts pierced and filled with earrings, or tattoos applied to arms, legs, or their central body.

- These acts have become a way for adolescents to make a statement (“I am different from you”). Be certain they know the symptoms of infection at a piercing or tattoo site (redness, warmth, drainage, swelling, mild pain) and to report these to a health care provider if they occur.
NURSING IMPLICATIONS IN ERIKSONIAN STAGE OF DEVELOPMENT

- Provide opportunities for the adolescent to discuss feelings about events important to him or her
- Offer support for decision making.
Adolescent behavioral psychosocial problems

Chemical Abuse

- Use of alcohol or drugs with the development of a physical and/or mental dependence on the chemical
- Can lead to physical and mental disorders and diseases
- **Reasons Chemicals Used:** Trying to relieve stress or anxiety; Peer pressure; Escape from emotional or psychological problems; Experimentation; Seeking “instant gratification”
- Treatment towards total rehabilitation
Assessment of Substance Abuse

If adolescents trust health care personnel, they will generally admit they have engaged in drug experimentation. Some common findings on the health history that suggest an adolescent is abusing some substance are:

1. Failure to complete assignments in school
2. Demonstration of poor reasoning ability
3. Decreased school attendance
4. Frequent mood swings
5. Deteriorating physical appearance
6. Recent change in peer group
7. Expressed negative perceptions of parents
Concerns Regarding Attempted Suicide

- One of the leading causes of death in adolescents
- Permanent solution to temporary problem
- Impulsive nature of adolescents, most give warning signs, call for attention.

**Reasons for Suicide**: Depression; Grief over a loss or love affair; Failure in school; Inability to meet expectations; Influence of suicidal friends or parents; and Lack of self-esteem

- Successful suicide occurs more frequently in males than in females, although more females apparently at tempt suicide than males (about 8:1)
Actions to take if you suspect someone is contemplating suicide:

- Listen.
- Take the person seriously.
- Get help from a responsible adult.
- Do not promise to “keep the secret.”
- Never assume it’s “just talk.”
- Encourage involvement in groups
- Know friends and what they are doing
Social Development

As a general rule, when parent-child relationships have been good before adolescence,

- they continue to be relatively smooth during adolescence

- However:
  - Relationships with friends and peers become increasingly more important
    - Give feedback on social behavior
    - Provide an objective standard for self-comparison
    - Teach social skills
Other Eriksonian stages on the minds of adolescents

While currently in the *identity vs. role confusion* stage,
- adolescents have ideally just finished working through the tension of *competence vs. inferiority*.
- They are ready after adolescence to take on the challenge of *intimacy vs. isolation*.
Social Development

• Team play
  • Adolescents seek group and/or team activities

• Benefits of team play.... The adolescent
  • Works toward team/group goals
  • Learns that intellectual demands are greater
  • Assumes greater social responsibility
  • Learns how to fail and to succeed
How Do These Changes Affect Teens?

- More time with friends
- May keep a journal
- More questions about sexuality
- Begin to lock bedroom door
- Involved in multiple hobbies/clubs
- More argumentative
- Interact with parents as people
Psychosexual Stages

- Genital (12-18 yrs.)  Theme: sexual identity
  - Boy friend & girl friend.
  - Self-identity

Nursing Implications in Freudian stage of development

- Provide opportunities for the child to relate with opposite sex.
- Allow child to verbalize feelings about new relationships.
Moral and Spiritual Development

Because adolescents enlarge their thought processes to include formal reasoning, they are able to respond to the question, “Why is it wrong to steal from your neighbor's house?” with “It would hurt my neighbor by requiring him to spend money to replace what I stole,” rather than with the immature response of the school-age.

1. Beginning in late childhood and continuing through adolescence and adulthood, responses typically reflect conventional moral reasoning
   - Emphasizes social roles, rules, and obligations
Nursing Implication

- Assess knowledge.
- Encourage questioning regarding fears, or risks.
- Involve in decision-making.
- Ask if patient wants parent there.
- Make as few of restrictions as possible.
- Suggest ways of maintaining control.
- Provide privacy for care
- Encourage to wear street clothes and perform normal grooming
- Allow favorite food to be brought in if not on a special diet
Adolescence

Wellness Promotion

- Health education regarding hygiene, nutrition, sex education, developmental changes, and substance abuse prevention.
THE END

THANK YOU