

كلية المعارف الجامعة

المرحلة الثالثة

النمو والنماء

الدكتور

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Human Growth and development

Part 8:

Adolescent stage

Adolescence is a transition period from childhood to adulthood. It is based on childhood experiences and accomplishments. It begins with the appearance of secondary sex characteristics and ends when somatic growth is completed and the individual is psychological mature.



Physical growth:

Weight:

- ❖ Growth spurt begins earlier in girls (10–14 years, while it is 12–16 in boys).
- ❖ Males gains 7 to 30kg, while female gains 7 to 25kg.

Height:

- ❖ By the age of 13, the adolescent triples his birth length.
- ❖ Males gains 10 to 30cm in height.
- ❖ Females gains less height than males as they gain 5 to 20cm.
- ❖ Growth in height ceases at 16 or 17 years in females and 18 to 20 in males.

Physiological growth

- ❖ Pulse: Reaches adult value 60–80 beats/min.
- ❖ Respiration: 16–20b/minute.
- ❖ Note : The sebaceous glands of face, neck and chest become more active.

When their secretion accumulates under the skin in face, **acne will appear.**

Appearance of secondary sex characteristics

1- Secondary sex characteristics in girls:

- ❖ Increase in transverse diameter of the pelvis
- ❖ Development of the breasts.
- ❖ Change in the vaginal secretions
- ❖ Growth of pubic and axillary hair.
- ❖ Menstruation (first menstruation is called menarche, which occurs between 12 to 13 years).

2- Secondary sex characteristics in boys:

- ❖ Increase in size of genitalia
- ❖ Swelling of the breast
- ❖ Growth of pubic, axillary, facial and chest hair.
- ❖ Change in voice.
- ❖ Rapid growth of shoulder breadth.
- ❖ Production of spermatozoa (which is sign of puberty) .

Cognitive development:

- Through formal operational thinking, adolescent can deal with a problem.
- Abstract thinking .

Emotional development:

This period is accompanied usually by changes in emotional control. Adolescent exhibits alternating and recurrent episodes of disturbed behavior with periods of quite one. He may become hostile or ready to fight, complain or resist everything.

Social development:

He needs to know "who he is" in relation to family and society, i.e., he develops a sense of identity. If the adolescent is unable to formulate a satisfactory identity from the multi-identifications, sense of self confusion will be developed according to **Erikson develop sense of (identity vs role confusion)**

- ❖ Adolescent shows interest in other sex.
- ❖ He looks for close friendships
- ❖ As teenagers gain independence they begin to challenge values
- ❖ Critical of adult authority
- ❖ Relies on peer relationship.

Adolescent problems

- Nutrition problems (Anorexia nervosa ,Bulimia and Pica)
- Attention deficit
- Anger issues
- Postural disorder
- Fatigue or quickly tired

- Anemia
- Nocturnal emission
- Masturbation
- Menstrual problems (amenorrhea, dysmenorrhea)
- Sleep problems (nightmares ,insomnia)
- Psychological problems (depression ,isolated and Suicide)
- Obesity
- Bad school performance.
- Acne

Adolescent Needs and Teaching

- + Relationships
- + Love and respect from other
- + Privacy
- + Sleep
- + Playing and exercise
- + Nutrition
- + Sexuality – STD's / AIDS
- + Substance use and abuse
- + Driving
- + Access to weapons

Summary of Milestones for adolescent

1. Fine motor skills well-developed.
2. Gross motor skills improve due to growth spurts.
3. Able to apply abstract thought and analysis.

