Growth And Development

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A. Growth

• Growth refers to an increase in physical size of the whole body or any of its parts.
• It is a quantitative change in the child’s body.
• It can be measured in Kg, pounds, meters, inches, … etc

Principle of growth and development

B. Development

• Development refers to a progressive increase in skill and capacity of function.
• It is a qualitative change in the child’s functioning.
• It can be measured through observation.

C. Maturation

Increase in child’s competence and adaptability. It is describing the qualitative change in a structure. The level of maturation depends on child’s heredity. "the process of being mature"

Importance of Growth and Development for Nurses:

• Knowing what to expect of a particular child at any given age.
• Early detection of deviation in child’s pattern of development
• Gaining better understanding of the reasons behind illnesses.
• Helping in formulating the plan of care.
• Helping in parents’ education in order to achieve optimal growth & development at each stage.
Types of growth and development

Types of growth:
- Physical growth (Ht, Wt, head & chest circumference)
- Physiological growth (vital signs …)

Types of development:
- Cognitive development
  thought processes and intellectual abilities including attention, memory, problem solving, imagination, creativity, academic and everyday knowledge, and language
- Motor skills
- Social development
  self-knowledge (self-esteem, sexual identity, ethnic identity), moral reasoning, understanding and expression of emotions, self-regulation, temperament, understanding others, interpersonal skills, and friendships
- Emotional development
  feelings, impulses, physiological responses and reactions (internal & external)

Methods to Evaluate Growth and development

Growth Chart

growth charts, graphic displays of normal progressive changes in height, weight, and head circumference. They consider the range of growth as expressed in percentiles, or as standard deviation from the mean for average height or weight for age. Head circumference measurements are common from birth to 2 years of age.

Uses of growth chart
- Growth monitoring
- Diagnostic tool
- Planning and policy making
- Educational tool
- Tool for action
- Evaluation
- Tool for teaching

**Note 1**: under 2 years child measure length by supine position while child above 2 years measure by standing position

**Note 2**: head and chest also very important in growth measurement should be measure under 2 years.

Head circumference is measured by wrapping the paper tape over the eyebrows and the around the occipital prominence
**Note 3:** common tool to assess development is **Denver Developmental Screening Test – 2**

- Very commonly used screening tool
- Birth to 6 years old
- 10-20 minutes to administer
- Four Domains: fine and gross motor, language, and social skills
  - Social/personal: aspects of socialization inside and outside the home, e.g. smiling
  - Fine motor function: eye/hand co-ordination, and manipulation of small objects, e.g. grasping and drawing
  - Language: production of sounds, ability to recognize, understand, and use of language, e.g. ability to combine words
  - Gross motor functions: motor control, sitting, walking, jumping, and other movements
General health promotion strategies for children

- Reduce child morbidity and mortality
- Control of communicable diseases
- Increase mothers awareness about the advantage of breast feeding
- Increase awareness about injuries during childhood
- Increase awareness about sexually transmitted infections
- Promote immunization program for all children
- Promote child nutrition