

- He needs help in his bath.
- He learns to feed himself, to dress and undress, to wash his face and hands, to brush his teeth and to toilet himself.

2- Sleep patterns

- The average pre-school sleeps 11 to 13 hours per day.
- The sleep of the 3-years old is frequently disturbed at night.
- Sleep problems are common and include, nightmares, night terrors.
- Most pre-school needs an afternoon nap until age 5 years.
- Bedtime rituals persist.

3- Safety measures

- Since pre-school children have more freedom, playing outdoors alone and frequently away from the safe environment, more accident are likely to occur.

4- Health supervision

- Regular visits for physician are important at intervals usually every six months or yearly.
- The physician or nurse give complete examination as visual and auditory perception for the child should be records the growth, give advises about nutrition and any problems which occur in the management of the child.

5- Nutrition

- The pre-school child is less interested in eating than he was during infancy because he interested in exploring his environment.

School Age Children

Growth and development of School Age Children

School age: That the period from 6 to12 year. It is characterized by eruption of permeated teeth and finished by beginning the puberty.

Physical growth

The growth is gradual until puberty.

□ □ Weight:

School-age child gains about 3.8 kg/year.

□ □ Formula is $\frac{(\text{age in years} \times 7) - 5}{2}$

Weight at 6 years → 20kgm.
weight at 12 years → 40kgm(double weight at 6 years).

□ □ Height :

The average gain in height 6cm/ year

□ □ Formula is the same as toddlers and preschoolers.

at 6 years → 117cm.

at 12 years → 150cm(3 times birth length).

Dentition: Permanent teeth erupt during school-age period, starting from 6 years

Head circumferences

At 6 years 51cm

At 12 years 53cm

Chest circumference (CC) is more than head circumference (HC)

Mid arm circumference at 12 years it is 17 to 18 cm.

Physiological growth

Vital signs :

Temperature: 37°C

Pulse: 95 beats /min

Respiration: 19-21 c/min

Blood pressure: 100/60 mmHg.

GIT system: maturation in GIT & the child able to digest any food.

Genitourinary system: is maturity in kidneys are better to concentrate urine.

Circulator system: soft heart sound

Neurological system: improved in memory & ability to conceptualization & full voluntary control of fine motors function.

Skeletal and muscular development: Muscles are more complain at this age so good posture should be encourage and good standing position.

Endocrine system is matured expect reproductive function

The immunological system: that function is to eliminate the foreign to the body so the lymphoid tissue is matured.

The sense organ: the smell and taste, the child can differ between objects at this stage.

Motor Development:

At 6 – 8 years

- ☐ ☐ Ride a bicycle .
- ☐ ☐ Runs, jumps, climbs, and hops .
- ☐ ☐ Can brush and comb hair .

At 8- 10 years

- ☐ ☐ Begins to participate in organized sports .
- ☐ ☐ Use both hands independently .
- ☐ ☐ Prints fluently .
- ☐ ☐ Increased smoothness and speed in fine motor control .

At 10- 12 years

- ☐ ☐ Enjoy all physical activities .
- ☐ ☐ Motor coordination continues to improve

☐ ☐ Psychosexual development according to **"Freud":he termed this stage "latency period"** in which the school child turns his attention and focus from sexuality to tasks of socialization and development of self-esteem.

Cognitive Development:

- ☐ ☐ At 7-11 years, the child able to function on a higher level in his mental ability, give similarities and differences between two things from memory and able to understand past, present, and future.
- ☐ ☐ Greater ability to concentrate and participate in self-initiating quiet activities that challenge cognitive skills, such as reading, playing computer and board games.

☐ ☐ **According to "Piaget" the child is in the stage of "concrete operation"**

Language Development:

- Sentence structure and use of grammar continue to improve.
- Talk in full sentence.
- Speech proceeds from egocentric to social.

Emotional Development:

- o Fears injury to body and fear of dark .
- o Jealous of siblings (especially 6–8 years old child).
- o Curious about everything .
- o Has short bursts of anger by age of 10 years but able to control anger by 12 years.

Social Development:

- o Continues to be egocentric .
- o The child develops sense of Industry
- o Failure to develop a sense of industry result in inferiority (feelings of inadequacy) and child become more isolated.
- ☐ ☐ Psychosocial development according to "**Erikson**": Erikson termed the psychosocial crisis faced by child aged from 6 to 12 years

"industry versus inferiority".

Needs of school age children:

- ☐ ☐ Sleep and rest.
- ☐ ☐ Bathing
- ☐ ☐ Nutrition
- ☐ ☐ Exercise and activity
- ☐ ☐ Dental health
- ☐ ☐ Education

a- Sex education. b- Religious education.

School age problems :

a) School phobia: All organic cause must be ruled out before school phobia. The most common complaints are abdominal pain, headache, vomiting, and regression.

b) Learning difficulties: The learning difficulties are represented in variety of specific learning disabilities in children. The difficulties are in reading, writing, and understanding.

c) Behavioral problems: Children sometimes employ aggressive, negative or disobedient behavior in an attempt to feel important and control others. The forms of aggression are :

a- Lying b- Stealing c- Cheating

*Health education: Encourage the rewarding system for desired behavior rather than punishing the undesired behavior .