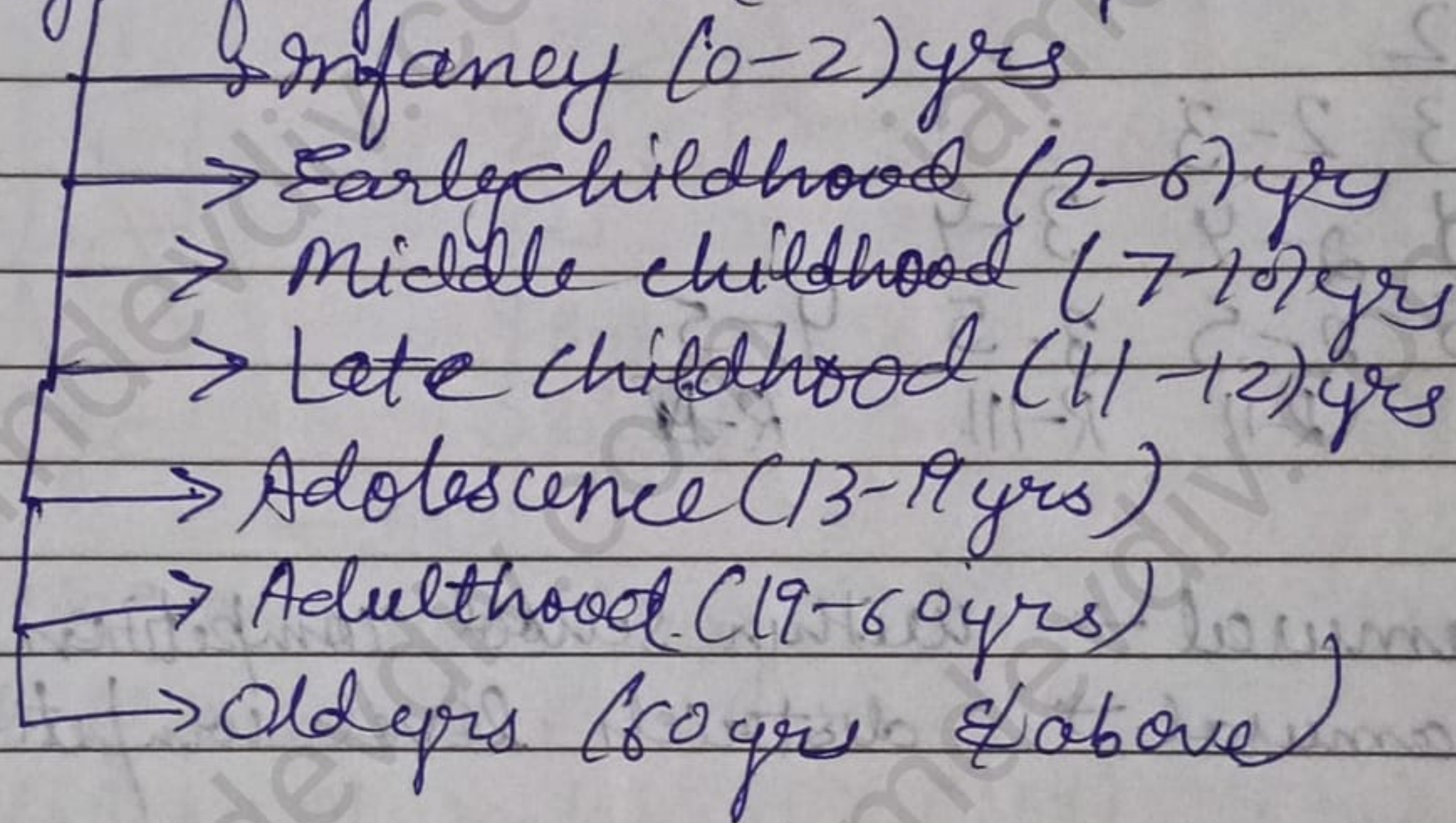


Date 15/5/23

Children & Women in Sports

Exercise guidelines of WHO for diff age groups.

Stages of Growth & Development.



① Infancy (0-2) yrs

- Exercise to develop head control, sitting & crawling.
- Gross motor activities should be promoted.
- Exercise for moving arms, legs, reaching object.
- Exercise like throwing, catching & kicking a ball.

② Early Childhood (3 to 6 yrs)

- Exercise to develop competence in movement skills.
- Emphasis on participation not on competition.
- Activities related to fine motor skills.

- Minimum 1 hrs regular medium ex.
- Recreative & enjoyable methods of phy. activities.
- Clean & safe environment.

(3) Middle childhood (7 to 10 yrs)

- Exercise to develop fine & gross motor skills
- Exercise to build and improve co-ordination skills.
- Ex. to develop synchronize the movements of body's sports
- Introduction of major sports activities cognitive & social skills.

(4) Later childhood (11 to 12 yrs)

- Exercise to develop body control, strength & Coordination.
- Activities related to endurance should be avoided
- Organized or team games to develop social consciousness.
- Teach basic rules of sports i.e fair play, simple strategies.
- Introduction to concept of sports training.

(5) Adolescence (13 to 18 yrs)

- Moderate to vigorous intensity phy. activity.
- 60 min to several hrs everyday.
- Muscle strengthening ex. at least 3 times a week.
- Bone strengthening strengthening ex & resistance ex. by net training.

• (E) Running, swimming etc. for stamina building.

(6) Adulthood (19-60 yrs)

- Moderate intensity phy. every day.
- Muscles strengthening ex. at least 2 times a week.
- Bone strengthening ex & resistance ex.
- Running, swimming etc for stamina building.

(7) Old Age (60 yrs & above)

At least 5 days of moderate intensity activities such as walking, light-jump etc. It should be done for above 45-60 min. These actions should be done over a period of 1-10 min. Those who are more active than an elderly mature, they should do more than 30 min of high-strength activity, combined with the actions of moderate intensity such as climbing stairs, running etc.

Common Postural Deformities & their corrective measures.

Postural deformity is the malformation of any components or body parts or joint of the body.

① Knock knee.

also known as Genu Valgum, is a knee misalignment that turns the knees inward. As a result, both knees touch or knock against each other in a normal standing posture but there is a gap of 3-4 inches b/w the ankles.

Causes

- weakness of muscles - & ligaments
- Overweight body.
- Lack of balanced diet
- Lack of Vitamin-D.

Preventive measure

- walking on an outward inclining surface & applying pressure on the outer edge of the feet.

Exercises like horse riding & keeping the pillows b/w the knees & standing erect for some time are the best

Yoga

- ① Padmasana
- ② Gomukhasana

② Flat Foot

Flat foot is also known as pes planus or fallen arches - It is a condition that may be diagnosed by looking at the arch of the foot or by taking the water print test. As the name flat foot suggests, people suffering from this deformity have either no arch

in their feet, or one that is very low, allowing the entire soles of the feet to touch the floor in standing posture.

Causes of flat foot

- ① Faulty posture
- ② Prolonged standing
- ③ Exercise body wet.
- ④ Lack of proper exercise.

Corrective measures

- ① Heel & toe walking
- ② Walking on sloping surfaces.

Exercises like jumping on toes & heels skipping rope, strengthens the muscles of foot which help to develop the arch in the foot.

Activities like picking up marbles with toes, writing rows in the sand with the toes will also help in developing the arch.

Yoga

- ① Ashwinkhasana
- ② Vajrasana

⑧ Bow legs

Genu varum, is a position of knees in which legs look like a bow, when the legs curve outward at the knees while the feet & ankles touch.

Infants & toddlers often have bow legs.

It may be caused due to lack of Vitamin D, phosphorus and calcium and can be easily cured at an early stage.

Corrective measures-

Feed calcium to children

Use of braces & modified shoes can be along with sufficient intake of balanced diet can prove to be of help. Walking on the inner edge of the feet may also help.

⑨ Round Shoulder

It is a postural deformity in which the shoulders are drawn, the head is extended with the chin pointing forward.

Causes of round shoulders

- ① Due to poor posture while working.
- ② Faulty furniture
- ③ Wrong habit of sitting / standing
- ④ Carrying heavy load on shoulder
- ⑤ By sleeping on one side.

Corrective measures

- ① Regular Exercise
 - ② Leaning back on the chair
- Most imp. measure to correct rounded shoulders is strengthening & stretching of muscles and trying to correct the imbalance of muscles by doing chest stretches, wall stretch, planks, pull ups, reverse shoulder stretch etc.

Yoga asanas,

- ① Chakrasana
- ② Dhanurasana

⑤ Kyphosis.

Hunch Back or rounded back.

It is a condⁿ of the spine where the curvature of the upper back gets exaggerated or inc. It is an exaggerated forward rounding of the back.

Cause of Kyphosis.

- ① Habit of holding the head forward in abnormal manner.
- ② Kyphosis can occur due to heredity, ageing disease (arthritis, osteoporosis), malnutrition, pulling of heavy wt for a period, unstable furniture, poor postural habit, weakness in muscles etc.

Corrective measures of kyphosis.

Physical therapy, swimming exercise (gym ball exercise), exercises with bands.

Yoga asanas

- ① Dhanurasana.
- ② Chakrasana
- ③ Bhujangasana.

⑥ Lordosis.

It is a common defect in deformity of posture. Here lumbar curve becomes more pronounced & front central position of pelvic region is tilted forward.

Corrective measures.

Ex. to develop strength in the pelvic region. like sit ups, sitting against the wall & pushing the trunk backward & lying on the back & raising upper extremities & legs together will give significant benefits.

Yoga asanas:

- ① Dhanurasana
- ② Halasana

⑦ Scoliosis

Greek word Skolios which means bent.

Scoliosis is a position in which the spine is tilted to either side of the body.

It is a position of exaggerated lateral curvature or sideways curvature of the spine.

In this disorder, the spine bends, twists or rotates in a way that it makes a C or an S shape. Corrective measures.

In cases of mild scoliosis, no treatment is necessary. Some children may need to wear a brace to stop the curve from worsening. Others may need surgery to keep the horizontal bars & screwing should be done on one opp-side. ~~breast~~ ~~break~~ in summer summer.

~~Sports participation of women~~

Sports Participation of Women in life.

Sports participation of women means women participation in the field of sports & games.

In 1952 Olympic games, the 1st Indian women took part, in 2000 Olympic games, Karnam Malleshwari (wt. lifting) became the 1st Indian woman to have won a bronze medal.

Sania Mirza

P. Telshe

Sania Nehwal

P. V. Sindhu

Mary Kom

Factors responsible for less participation of women in the field of sports.

- | Physical factors | Psychological factors | Sociological factors |
|-------------------------------|----------------------------------|---|
| ① Lack of fitness & wellness. | ① Lack of confidence | ① Lack of legislation |
| ② Female Athlete Triad | ② Lack of interest of spectators | ② Lack of time for sports activity |
| | ③ Less media coverage | ③ Male dominated culture in the sports. |
| | ④ Personal safety | ④ Attitude of society towards women in sports participation |
| | ⑤ Less education of women. | |

Special consideration (Menarche & Menstrual Dysfunction)

The period of adolescence is marked by certain universal physical & biological changes in the body which lead to the attainment of sexual maturity.

The time when sexual maturity is reached is called puberty. Menarche (first menstruation) is usually considered the point of sexual maturity for girls.

It is the period in which female reproduction system matures & the body prepares itself for potential pregnancy.

It is the process in which female reproductive system matures and the body prepares itself for potential pregnancy.

- Menstruation (also termed as period or bleeding) is the process in a woman of discharging (through the vagina) blood & other material from the lining of the uterus at about a monthly interval from puberty until menopause; except during pregnancy.

This discharging process lasts about 3-5 days. Women usually have periods until about age 45 to 55 & have menopause usually around age of 50.

Menopause means that a woman is no longer ovulating & can no longer get pregnant.

Special Consideration

Menarche
It is the 1st menstrual bleeding & is a central event of female puberty.

Menstrual Dysfunction
It is a disorder involving abnormal cycle. In other words, abnormal bleeding & during the menstrual cycle.

Normal range of the menstruation cycle is 21 to 35 days. If it happens earlier than 21 days or after more than 35 days, then it's a problem.

Other menstrual problems include more or more periods, menstrual flow heavier or lighter or irregular with period cycle happening longer than 7 days, any pain, cramping or vomiting during periods, bleeding after menopause etc.

Causes:

- 1) Anemia
- 2) Stress
- 3) Dietary disorder
- 4) Disease
- 5) sudden change in ex. schedule.
- 6) Travel
- 7) Other medical complications etc.

Special Consideration.

Sports like Judo, boxing, wrestling, taekwondo etc exert a lot of pressure on athletes to maintain their shape & net participation in sports like distance running, cycling, cross country etc. Athletes have to take a balanced diet since there demand high levels of energy and a good qty of dietary intake.

Such pressure put the athletes health at risk & leads to Female Athlete Triad - The term triad derived directly by American college of sports medicine. In 1992, the triad were

- ① disordered eating
- ② amenorrhoea &
- ③ osteoporosis

Osteoporosis

It is breaking of the bone due to the loss of bone density & impaired bone formation due to insufficient amount of calcium in skeletal system.

Amenorrhoea

The cessation of women's menstrual cycle for more than 3 months or more

Eating Disorders

Are the mental illness which cause disturbances of an individual regular diet