



**#hERHealth, a social awareness initiative of Nashik Obgy society & team 2023-24**



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## **Developmental Changes in boys & girls**

Adolescence, puberty or teenage is the phase of life connecting childhood to adulthood. It is a unique stage of human development which is associated with emotional, hormonal, as well as physical changes. It is a normal aspect of growing up, and each one's experience is unique.

Adolescence can be a challenging and confusing time for a teenager and parents. Knowing what and why these changes occur can help them to feel more in control as transition happens.

The physical changes of puberty follow a definite path of progression, ranging from prepubertal, to full maturity where an adolescent reaches sexual maturity and becomes capable of reproduction.

It is different for boys and girls. On average, puberty typically begins between 8 and 13 in girls and 9 and 14. Boys hit puberty about a year later than girls.

Developmental changes in girls:

Stage 1: Thelarche

- It refers to breast growth. The first sign of puberty in girls, occurring around 9 or 10 years. An increase in oestrogen is responsible for it.

Stage 2: Pubarche

- Approximately 6 months after thelarche begins, pubarche, or growth of pubic hair occurs. Pubic hair initially appears light, sparse and straight but becomes coarse, thick, and dark throughout the course of puberty. Approximately two years after pubarche, axillary hair will begin to grow.

### Stage 3: Menarche

- Menarche is the girl's first menstrual period. Typically occurs 1.5 to 3 years after thelarche at approximately 10-12 years of age.
- There is also an enlargement of the labia majora and labia minora. Clear to white vaginal discharge may also be seen prior to the onset of menarche.

### Developmental changes in Boys:

#### Between the ages of 9 TO 11 years

- Genital development (growth of testicles and scrotum) is the first sign of puberty.
- Growth of sparse hair around penis and under arms.
- An increase in height (typically about 2 to 2½ inches per year).

#### Between the ages of 11 and 14

- Continued growth of genitals. Wet dreams are ejaculation at night while in sleep.
- Darkening, coarsening of pubic hair in the shape of a triangle in the genital area.
- Continued increase in height.
- Increase sweating, which can lead to body odour.
- Change in voice leading to hoarseness and cracking.
- Increased muscle mass.

Some breast development, occurs in about 50% of all teenage boys between the ages of 11 and 15, but it resolves by the end of puberty.

#### Between the ages of 14 TO 16 years

- Growth in penis size and darkening of the skin on scrotum. Red ridges on testicles called rugae begin to develop.
- Body hair growth that reaches adult levels. Pubic hair remains coarse.
- A peak growth spurt that averages nearly 4 inches per year.
- Development of pimples.
- Continued cracking of the voice.

### Emotional and Psychological Changes:

- Adolescence is a phase of psychological changes and development where they have to establish their identities, own beliefs, values, and what they want to accomplish in life. The psychological growth during this period results in a wide variety of behaviour which should be considered normal. They have rapid wide mood swings,

become easily upset and emotional, and alternate between extreme cooperation and extreme resistance to adult guidance. They form close friendships with same-sex peers. Risk-taking behaviour involving driving, substance use, and/or sexual activity may have harmful consequences. Experimentation seems to be a normal part of mid-adolescent development. It is a period of immense stress with board exams and career choices. They have a lot of energy which should be channelized in the right direction taking care of their psychological and emotional wellbeing.

In general, puberty follows a predictable pattern of onset and sequence. However, due to differences in each individual, puberty may proceed in a less-than-predictable way.