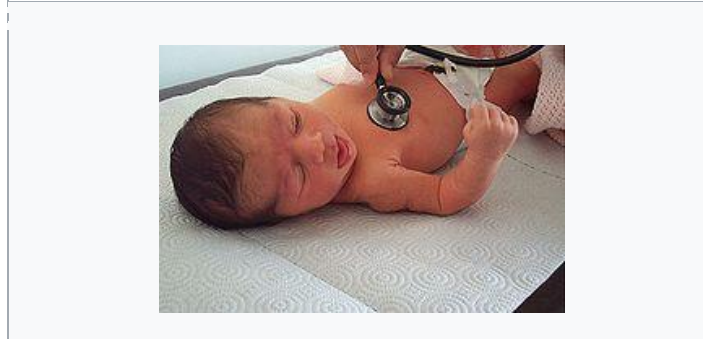


Field of Pediatrics

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Pediatrics (also spelled **paediatrics** or **pædiatrics**) is the branch of medicine that involves the medical care of infants, children, and adolescents.

The American Academy of Pediatrics recommends people be under pediatric care up to the age of 21.

A medical practitioner who specializes in this area is known as a **pediatrician**, or **paediatrician**.

The word *pediatrics* and its cognates mean "healer of children"; they derive from two Greek words: *παῖς* (*pais* "child") and *ιατρός* (*iatros* "doctor, healer").

Objectives:

- 1History
- 2Differences between adult and pediatric medicine
- 3Education Requirements
- 4Training of pediatricians
- 5Subspecialties

History



Part of Great Ormond Street Hospital in London, United Kingdom, which was the first pediatric hospital in the English-speaking world.

Hippocrates, Aristotle, Celsus, Soranus, and Galen, understood the differences in growing and maturing organisms that necessitated different treatment: ("In general, boys should not be treated in the same way as men." Celsus).

A second century AD manuscript by the Greek physician and gynecologist Soranus of Ephesus dealt with neonatal pediatrics.

Islamic writers served as a bridge for Greco-Roman and Byzantine medicine and added ideas of their own, especially Haly Abbas.

The Persian scholar and doctor al-Razi (865–925) published a short treatise on diseases among children.

The first book about pediatrics was ("Little Book on Children Diseases and Treatment"), by the Italian pediatrician Paolo Bagellardo.

The Swedish physician Nils Rosén von Rosenstein (1706–1773) is considered to be the founder of modern pediatrics as a medical specialty, while his work *The diseases of children, and their remedies* (1764) is considered to be "the first modern textbook on the subject".

The first generally accepted pediatric hospital is the *Hôpital des Enfants Malades* (French: *Hospital for Sick Children*), which opened in Paris in June 1802 .

Differences between adult and pediatric medicine

1. The body size differences are paralleled by maturation changes. The smaller body of an infant or neonate is substantially different physiologically from that of an adult.
2. Congenital defects, genetic variance, and developmental issues are of greater concern to pediatricians than they often are to adult physicians.
3. A common adage is that children are not simply "little adults". The clinician must take into account the immature physiology of the infant or child when considering symptoms, prescribing medications, and diagnosing illnesses.
4. A major difference between the practice of pediatric and adult medicine is that children, in most jurisdictions and with certain exceptions, cannot make decisions for themselves.
5. The issues of guardianship, privacy, legal responsibility and informed consent must always be considered in every pediatric procedure. Pediatricians often have to treat the parents and sometimes, the family, rather than just the child.
6. Adolescents are in their own legal class, having rights to their own health care decisions in certain circumstances.

Education Requirements

1. Aspiring medical students will need 3 years of undergraduate courses at a college or university, which will get them a BS, BA, or other bachelor's degree.
2. After completing college future pediatricians will need to attend 4 years of medical school .
3. later do 3 more years of subspeciality training,
4. In high school, future pediatricians are required to take basic science classes, such as, biology, chemistry, physics and others.

Training of pediatricians

The training of pediatricians varies considerably across the world. Depending on jurisdiction and university, a medical degree course may be either undergraduate-entry or graduate-entry.

Pediatricians must undertake further training in their chosen field. This may take from four to eleven or more years, (depending on jurisdiction and the degree of specialization). The post-graduate training for a primary care physician, including primary care pediatricians, is generally not as lengthy as for a hospital-based medical specialist.

Specialties within pediatrics require further training in the form of 3-year fellowships. Specialties include critical care, gastroenterology, neurology, infectious disease, hematology/oncology, rheumatology, pulmonology, child abuse, emergency medicine, endocrinology, neonatology, and others.

Subspecialties

Subspecialties of pediatrics include:

- Adolescent medicine
- Child abuse pediatrics
- Clinical informatics
- Developmental-behavioral pediatrics
- Electrophysiology
- Genetics
- Headache medicine
- Hospice & palliative care
- Neonatology
- Pain medicine
- Pediatric allergy and immunology
- Pediatric cardiology
- Pediatric critical care
- Pediatric emergency medicine
- Pediatric endocrinology
- Pediatric gastroenterology
- Pediatric hematology
- Pediatric infectious disease
- Pediatric nephrology
- Pediatric neuropsychology
- Pediatric oncology
 - Pediatric neuro-oncology
- Pediatric pulmonology
- Pediatric rheumatology
- Sleep medicine
- Social pediatrics
- Sports medicine
- Transplant hepatology

The normal child:

It is the child who is apparently normal regarding growth and development.

Normal growth:

Growth includes three parameters , weight , height and head circumference

Weight: the normal increment in weight in children is as follow:

At birth : 2.5-4.5 kg

At 6 months: double birth weight

At 12 months: triple the birth weight

At 2 years age : Quadruple birth weight

Then after 10 gm/day

Height: the normal increment in height in children is as follow:

At birth : 50 cm

At 1 year : 75 cm

At 2 year: 85 cm

At 4 year : 100 cm

Then after that 6 cm/year

At adolescent period 8 cm/year

Head circumference: the normal increment in head circumference (OFC) in children is as follow:

At birth : 35 cm

During the first three months of life the normal increment in OFC is 2cm/month

During the second three months of life the normal increment in OFC is 1cm/month

During the second 6 months of life the normal increment in OFC is 0.5cm/month

Then the OFC increase 10 cm for the rest of the life

Development:

The development means the skills or mile stones that the baby can do at certain age.

Development includes 6 items:

- gross motor skills: like the time the baby can sit, stand , walk or run.
- fine motor: the time the baby can do the fine works like writing
- hearing: includes the normal development of hearing.
- vision: includes the normal development of vision.
- speech: includes the normal development of speech like the time the baby talk one word, then tow words the phrase etc.
- social development: includes the normal development of social interactions like knowing strangers , or respond to name or respond to no.