opening extract from

Baby and Child Healthcare

written by

Dr. Miriam Stoppard

published by

Penguin Books Ltd

baby & child healthcare

The essential A–Z home reference to children's illnesses, symptoms and treatments

Dr. Miriam Stoppard

Contents

Note: we use the masculine pronoun "he" when referring to the baby or child, unless the child shown in a photograph is female. This is for convenience and clarity and does not reflect a preference for either sex.

Preface

I WROTE THIS BOOK WHEN I WAS bringing up four little boys and quite often found myself tending to a sick child in the middle of the night. Those nightly vigils convinced me that an anxious parent, faced with a sick child, needs straight, uncomplicated information and advice, and so I arranged the book in a way that I would have found most helpful when I was in that position. I am delighted to update the book for today's parents.

The A–Z of childhood complaints is the mainstay of the book. All the information is given in simple terms that are easy to understand. Parents are directed to possible courses of action in a clear, logical way, and advice is given step by step. Emphasis on speed is always made when time is of the essence and a doctor should be contacted immediately or an ambulance sought.

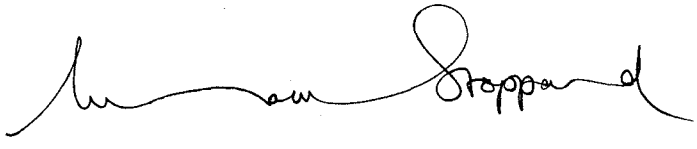
It can be difficult to tell exactly what is wrong with a child from the various symptoms – fever, pain, redness, swelling, vomiting – and on most occasions a doctor is required to make an accurate diagnosis. However, to help the parent determine the most likely causes of the child's complaint, a section is devoted to the analysis of symptoms.

For some parents, having an ill child is not a transient event, but one that stretches into the future. Their responsibility is to cope with a chronically ill child. I have tried to cover the main conditions, giving information on possible causes, the expected course of the disease, and how to make life easier for your child, yourself and the rest of your family. Long-term prognosing is always difficult, and sometimes dangerous, but I have attempted to indicate what the future might hold so that parents can accumulate practical experience and knowledge for the future. I apologize for those conditions that could not be included.

AMIE STAMP

Baby and Child Healthcare is full of illustrations – both drawings and photographs; in some chapters, the text is in the form of annotation to the illustrations. This is because one of my main aims is to give information in a readily accessible form, almost at a glance. There is, of course, ample opportunity to use the book as a straightforward reference book so that you gain knowledge gradually.

I don't have any personal axes to grind, but the book is opinionated and I make no apologies for that. For instance, despite controversy in the U.K. about the possible association of the MMR vaccination and autism, I continue to advocate vaccination as there is no robust scientific evidence of a cause and effect relationship. Where such an opinion is given, it is based on controlled research studies, or the lack of them, not out of personal bias. Throughout the book I hope to give parents enough clear, up-to-the-minute information to learn to trust their own instincts and to know when to be their own family nurse or doctor and when it is essential to get medical help.

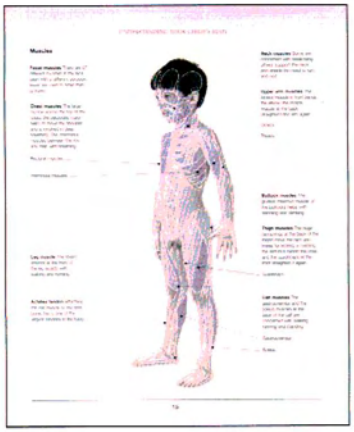


How to use this book

When your child is ill, you need to know what to do – whether to call the doctor, or whether you can safely treat your child at home yourself. You may also be unsure of what is wrong with him and need help in determining what the matter is.

How your child's body works

An illustrated guide to the skeleton, muscles, organs and glands of your child's body is given on pages 12 to 22. This will help you to understand what the constituent parts of the body look like, where they are and how they function.



If your child is ill and you think you know what is wrong

Turn straight to the relevant article in the A–Z of Common complaints, pages 52 to 264. This is an alphabetical listing of the most common complaints affecting children – from bruises to bronchitis, stings to styes. There, you will find an explanation of the illness, with a list of the symptoms most likely to appear. The circumstances under which you should call the doctor are clearly defined, followed by the probable treatment. There is advice, too, on what you yourself can do to help your child (both treatment and nursing tips). There are special charts to aid diagnosis for diarrhoea, fever and vomiting.

If you are not sure what is wrong

If your child has an obvious symptom, but you are not sure which A–Z entry to look up, turn to the Visual diagnosis guides, pages 43 to 48. Although it is hard to give a diagnosis from one or two symptoms, these guides should help to point you in the right direction.

If you are looking after a sick child

The section on pages 24 to 40 gives tips on caring for a sick child, and shows, with step-by-step illustrations, how to take a temperature and give medicines. It also provides practical advice on how to reduce fevers and make your child comfortable, how and what to feed him, how to keep him amused and, should the need arise, how to prepare him for a stay in hospital.

Complementary therapies

This section, on pages 316 to 318, outlines a safe approach to complementary medicine in children. There are guidelines on what to consider before embarking on a complementary therapy and where the possible pitfalls lie. Always consult your doctor for his advice before approaching a therapist.

Personal records

On pages 320 to 323 there are quick-reference charts for vaccinations – which ones your child needs and when; and infectious fevers – their symptoms, treatment and prevention. There is also a growth chart to give you reassurance that your child's growth is within normal limits.

How to prevent accidents The most sensible precautions for safeguarding your child inside and outside—at home and at play—are shown on pages 266 to 282. Road and car safety are also dealt with.

If your child has had an accident

If your child has an accident, you must be prepared to deal with it. Where possible, this preparation should involve going on a first-aid course, but you should frequently remind yourself of the basic, life-saving techniques by referring to the first-aid section on pages 284 to 314.

Bones

THE BODY IS BUILT on a framework of 206 bones called the skeleton. These bones act as levers for muscles to pull against, thus enabling movement, and they surround and protect the vital organs of the head, chest and abdomen.

How bones develop

Bones consist of a central shaft and two shaped ends. In a mature bone, the shaft and ends are hard structures, with a soft inner core of bone marrow (*see below*). In newborn babies, the bones are mostly made up of a soft, bendy material called cartilage, and, as your child develops, this cartilage is gradually converted to bone, a process known as *ossification*. In early childhood, the shaft is bone but the ends still consist largely of soft cartilage. By the time your child reaches adolescence, the bone formed in the ends joins the bone in the shaft and growth stops. Throughout childhood the bones are therefore fairly soft, which is why so-called "greenstick fractures", where the bone bends rather than breaks, can occur (*see page 70*).

What happens when your child grows

Your child grows in height as his bones lengthen. This growth does not take place over the whole length of a bone, but at each end. Growth occurs gradually throughout childhood. At puberty, however, both girls and boys put on a rapid growth spurt. With girls this normally begins when they are about 11 years old, and in boys about a year later. Girls stop growing when they are about 18; boys continue growing for one or two years longer, which accounts, at least in part, for the greater average height in boys.

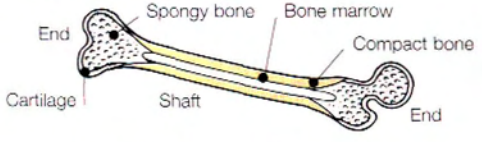
Joints

The separate bones of the skeleton are connected by joints, and these joints are held together by strong bands of fibrous tissue called ligaments. There are several different types of joint – fixed, partly movable and freely movable. *Fixed joints* allow no movement; *partly movable joints* allow slight movement; *freely movable joints* allow movement in several directions, and there are several different types – hinge joints and ball-and-socket joints are two examples.

How bones are constructed

Each bone consists of a shaft and two ends. When fully developed, the shaft is largely made up of hard (or compact) bone with a soft central core of bone marrow. Most of the blood cells are made in the bone marrow – particularly in the large bones such as the thigh bone. The ends are made up of spongy bone and capped with cartilage to cushion them against the next bone.

Cross-section of mature bone



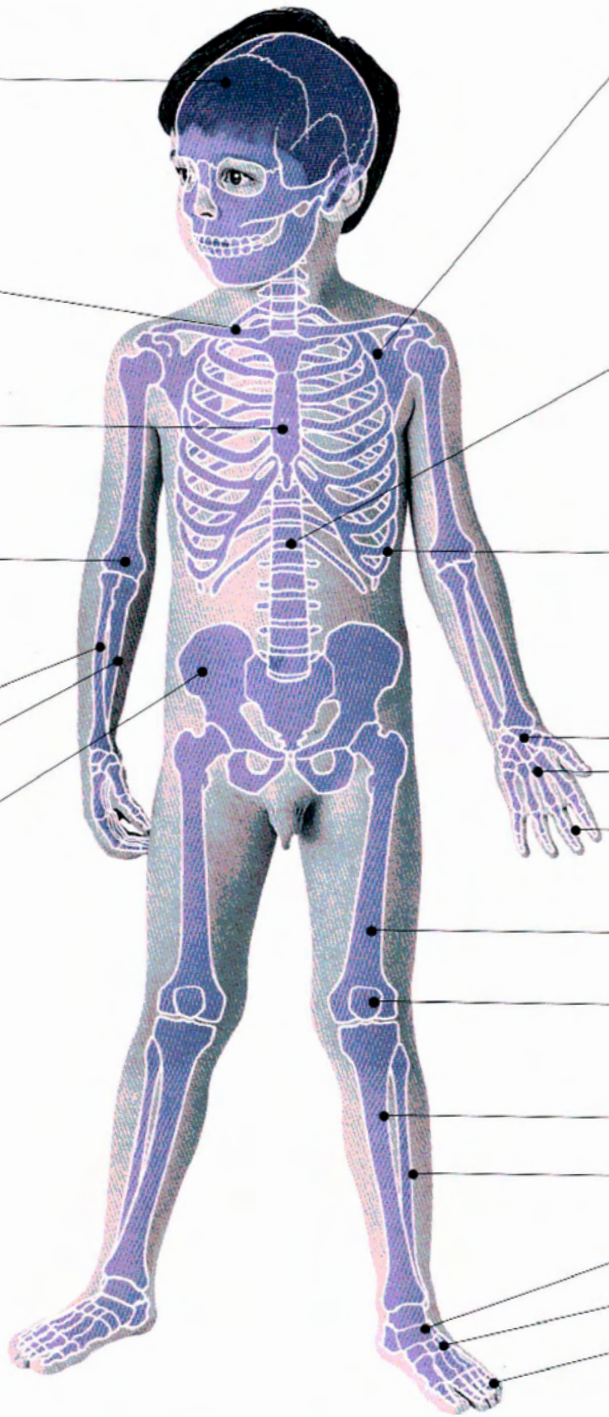
Adult's forearm

Child's forearm

Bone development

The x-rays above show what happens to bones as they develop. The shape of each bone is present at birth. The bones in each child's arm are made of areas of cartilage (not visible on the x-ray) and bone (visible as solid white areas). As a child develops the cartilage is converted to bone. By adolescence, this conversion is complete and the bones are solid.

Bones



Skull Made up of several bones fixed together to form a solid casing which protects the brain and other sensory organs in the head

Collar bone (clavicle) A long, curved bone that joins the shoulder joint at one end and joins the breastbone at the other end

Breastbone (sternum) The central bone to which most of the ribs are joined, so forming the rib cage

Upper-arm bone (humerus)

Lower-arm bones
Radius
Ulna

Hip bone (pelvis) Large bone that forms part of the hip joint. The two hip bones are joined together at the front and to the spinal column at the back to form a bowl-like structure (pelvic girdle), which surrounds and protects the urinary system, bladder and the reproductive organs in females

Shoulder blade A large, flat bone which forms part of the shoulder joint

Spinal column Made up of 33 bones, the spinal column surrounds and protects the delicate spinal cord – the major nerve motorway of the body

Ribs 12 pairs of ribs form a cage that houses the vital organs such as the heart, lungs and stomach

Wrist bones (carpals)

Hand bones (metacarpals)

Finger bones (phalanges)

Thigh bone (femur)

Kneecap (patella)

Leg bones
Tibia
Fibula

Ankle bones (tarsals)

Foot bones (metatarsals)

Toe bones (phalanges)