

Children and their health

Chapter map

Children under the age of 16 comprise 20% of the population of the UK and of most industrialized countries, but in many developing countries, children represent more than 50% of the population. In all countries, the management of children's health problems is a high proportion of the medical workload. Many GPs find that 30% of their consultations are for children, particularly preschool children (under 5 years) (medical students in the middle of a 2- or 3-month paediatric attachment may wonder why only 5% of their training should be devoted to children!). This chapter sets the scene for your study of paediatrics, starting with an overview of child health globally and in the UK. We then review societal factors relevant to paediatrics, community and social aspects of child health and finally the child in hospital.

- | | |
|---|--|
| 1.1 Early life is key, 3 | 1.5 Child health in the community, 10 |
| 1.2 Global Child Health, 4 | 1.5.1 Health personnel, 10 |
| 1.3 Child mortality and morbidity in the UK, 6 | 1.5.2 Health surveillance and promotion, 11 |
| 1.3.1 Infant mortality, 6 | 1.5.3 Schools and nurseries, 13 |
| 1.3.2 Child mortality, 6 | 1.6 Social aspects of child health and care, 14 |
| 1.3.3 Childhood morbidity, 7 | 1.6.1 Parental responsibility, 14 |
| 1.4 Children in society, 8 | 1.6.2 Social services, 14 |
| 1.4.1 Socioeconomic inequalities, 8 | 1.6.3 Voluntary services, 15 |
| 1.4.2 Changes in family structure, 9 | 1.6.4 Adoption, 15 |
| 1.4.3 Ethnicity, 9 | 1.7 Children in hospital, 15 |
| 1.4.4 Laws relating to the young, 10 | 1.8 Research and evidence-based medicine, 18 |
| 1.4.5 Ethics and children's rights, 10 | Summary, 18 |

1.1 Early life is key

What happens to a child during pregnancy, and the first couple of years of life is crucial to later physical and emotional health. This is mediated through a range of mechanisms:

- programming (the Developmental Origins of Health and Disease, or Barker hypothesis). This may adapt the child for an adverse environment – but with a long-term cost;
- early cognitive experience, parenting and attachment (see Section 12.1) (which help to form the growing brain);
- adverse childhood experiences – these have been shown to negatively affect later long-term health;
- nutrition, including lack of food or micronutrients, and obesity.

Optimizing pregnancy and early childhood is therefore one of the best investments a society can make. This applies across the world, whether in industrialized or developing countries.

1.2 Global child health

Children make up about two billion of the world's population. Health inequalities between nations are seen most starkly in childhood indicators, such as child mortality rates (Figure 1.1). Most childhood deaths occur in sub-Saharan Africa and South Asia (Figure 1.2), and malnutrition causes or contributes to at least half of them, along with many other factors (Figure 1.3). There has been a sustained international effort in the last few decades to address inequalities, through the Millennium Development Goals adopted in 2000 by all members of the United Nations, which were then succeeded by the Sustainable Development Goals in 2015. These set

measurable targets in relation to poverty, maternal and child health and combating disease such as human immunodeficiency virus (HIV) and malaria. In the last three decades, the number of global child deaths has more than halved, from 12.6 million in 1990 to 5.4 million in 2017. This is great progress, but much remains to be done.

Under-5 mortality rate (rate/1000 live births)

The under-5 mortality rate is a useful measure of child health internationally. While similar to the infant mortality rate, it detects trends that the infant mortality rate might miss, because in some countries infants dying in the first few weeks are not recorded.

Child mortality

This is the same measure, but expressed as a percentage.

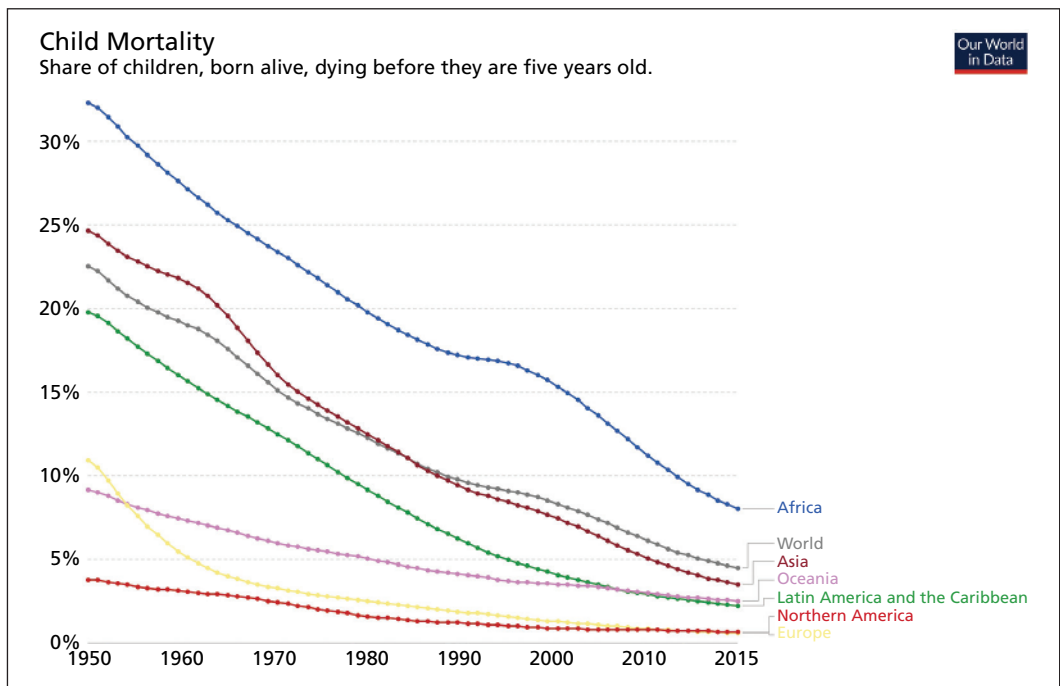


Figure 1.1 Changes in worldwide child mortality rates. *Source:* UN Population Division (2017 Revision), "Child and Infant Mortality" ourworldindata.org/child-mortality. Licensed under CC-BY-4.0.

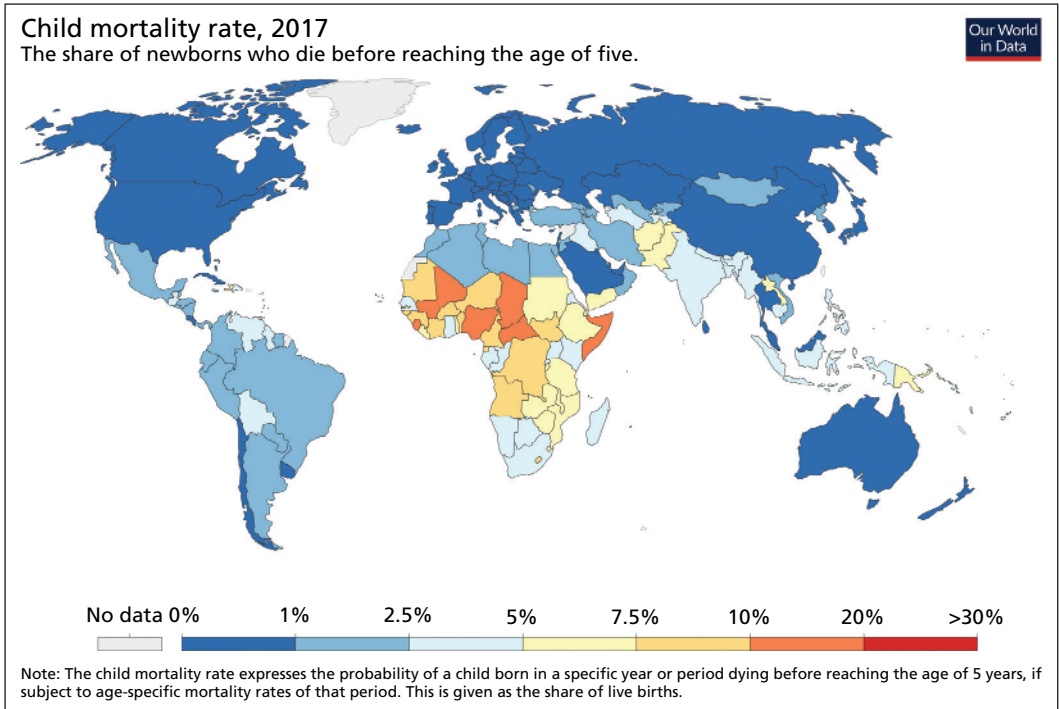


Figure 1.2 Worldwide child mortality rates in year 2017. There was a large reduction of about 65% from 1960 to 2000, and progress has accelerated in the past two decades. *Source:* UN Inter-agency Group for Child Mortality Estimation, "Child and Infant Mortality" ourworldindata.org/child-mortality. Licensed under CC-BY-4.0.

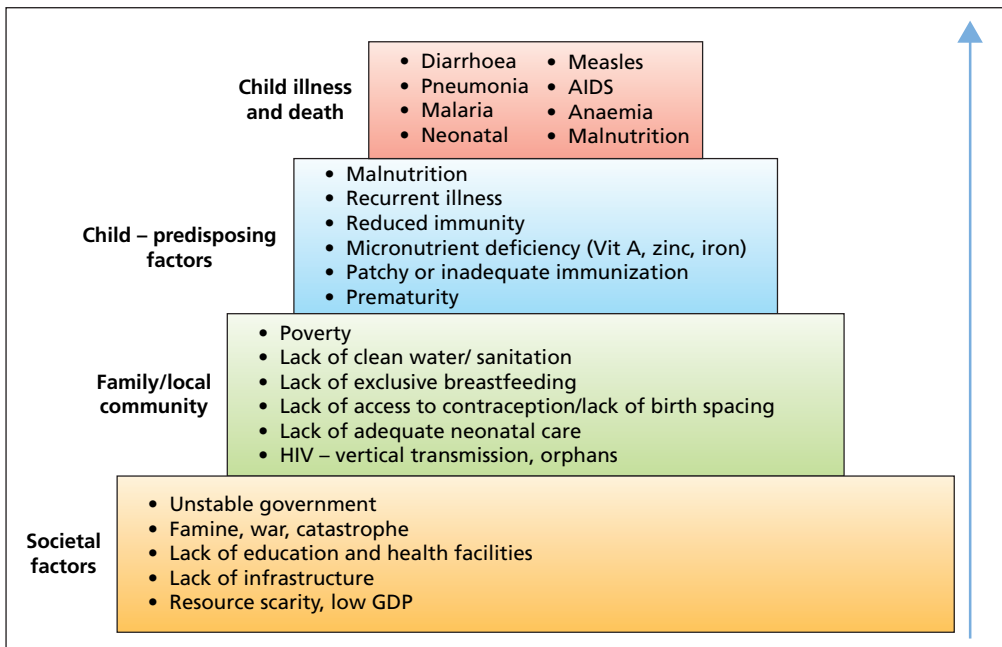


Figure 1.3 Global causes of child morbidity and mortality. The leading cause of death is pneumonia.



RESOURCE

- See the United Nations Development Programme site (www.undp.org) and click the link for 'Sustainable Development Goals' to find out more about these ambitious targets.
- Health Metrics and Evaluation has a superb site to explore health and other data (www.healthmetricsandevaluation.org). Go to 'GBD compare' in the top menu to review the global burden of different diseases by age and region. Or under 'Results', look at the data visualization on Child Mortality.
- Visit www.gapminder.org for another great site to compare health and other data between countries and historically.

1.3 Child mortality and morbidity in the UK

The causes of death and the patterns of illness in children differ markedly from those in adults. They are influenced by a diversity of factors, which include sex, social class, place of birth and season of the year. The decline in child mortality in the past century has resulted more from preventative (public health) measures than from improved treatment. Today virtually the entire population of the UK has safe food and water, free immunization and easy access to local health care. This is not the case in non-industrialized countries.

In the UK, child mortality is concentrated in the perinatal period (Table 1.1 UK mortality rates – see

Table 1.1 UK mortality rates

Mortality indices in 2018	UK rate
Stillbirth rate (stillbirths per 1000 total births)	4.0
Neonatal mortality rate (deaths in first 28 days per 1000 live births)	2.8
Perinatal mortality rate (stillbirths + first week deaths per 1000 total births)	5.6
Infant mortality rate (deaths in first year per 1000 live births)	3.8
Under-5 mortality rate (deaths in the first 5 years per 1000 live births)	4.3

chapter text). The only remaining scope for a major reduction in child deaths lies in better obstetric, neonatal and infant care.

1.3.1 Infant mortality

- **Stillbirth:** a child born dead after the twenty-fourth week of pregnancy
- **Abortion or miscarriage:** a fetus born dead before 24 weeks of gestation
- **Live birth:** any newborn with signs of life (e.g. heartbeat) at birth at any gestation.

- UK infant mortality continues to fall (currently 3.8 per 1000 live births in 2018) (Figure 1.4).
 - But two thirds of the countries in the European Union have lower rates.
 - Several East European countries have infant mortality rates 2–3 times higher.
 - Some non-industrialized countries have rates over 150.
- Improvement in UK infant mortality:
 - Mainly due to reduction in *neonatal* mortality
 - Less improvement in *postneonatal* mortality (1 month to 1 year).
- Some deaths result from persistent, serious congenital abnormalities and perinatal problems, others due to accidents or diagnosable disorders, but many are infants who die at home, for whom no cause of death is found at post-mortem (Section 16.3).

1.3.2 Child mortality

- The major causes of childhood death are neoplasms and accidents (Figure 1.5).
- Deaths are concentrated in early life and are higher for boys at all ages, by a factor of 1.3 in the first month of life and by 1.6 for children of school age.
- For school children, accidents are an important cause of death, particularly road traffic accidents with the child as pedestrian or cyclist – this proportion increases with age.
- The decline in mortality from infectious diseases has made other serious disorders appear more common. Death from malignancy is now more common than from infection (Figure 1.5).

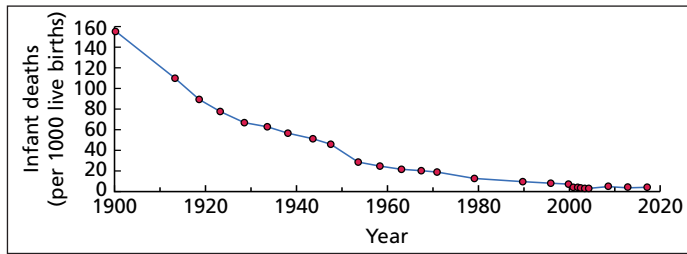


Figure 1.4 Infant mortality (0–1 years). By 2000, the infant mortality in England and Wales had fallen to a fraction of the level in 1900 (from 156 per 1000 live births to 5.6 per 1000). It has continued to fall further, to 3.8 in 2018. Even in the last 30 years it has fallen by nearly 60%.

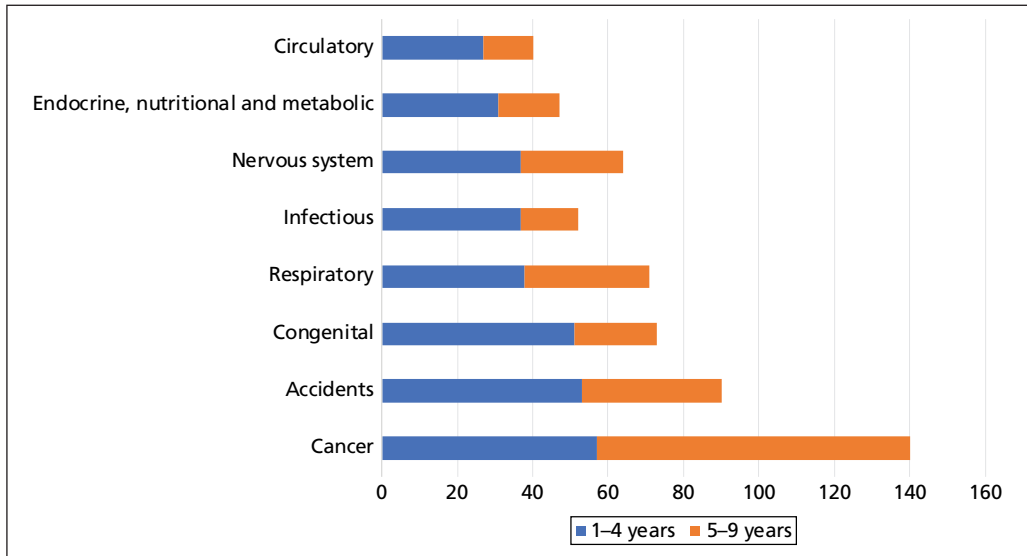


Figure 1.5 Leading causes of death in children aged 1 to 9 years. England and Wales 2018. *Source:* Modified from Office for National Statistics. <https://stateofchildhealth.rcpch.ac.uk/evidence/mortality/child-mortality/>.

1.3.3 Childhood morbidity

- The pattern of morbidity in children is very different from that of adults (Figure 1.6):
 - Infections are common, especially of the respiratory, gastrointestinal and urinary tracts, as well as the acute exanthemata (e.g. chickenpox).
 - Degenerative disorders and cerebral vascular accidents are very rare.
- New forms of chronic disease are becoming relatively more important as formerly fatal childhood disorders become treatable (but not necessarily curable):
 - Children with complex congenital heart disease, malignant disease, cystic fibrosis and renal failure benefit from modern life-saving therapies

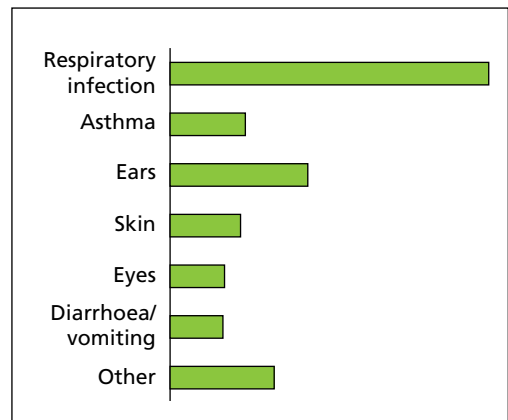


Figure 1.6 Most common reasons for a child to be seen by their GP.

but may not achieve a cure and often have to live with the difficulties and side effects of complicated treatment.

The hallmarks of childhood are growth and development, which influence both the kinds and the patterns of childhood illness. Congenital malformations, genetic disease and the consequences of problems in the perinatal period (e.g. cerebral palsy) are common. You do not need to spend much time looking after children to realize that disturbances of development and behaviour, and anxiety about normal variants, are both prevalent and important to parents.

It has been estimated that a British GP with an average practice would see a new case of pyloric stenosis every 4 years, childhood diabetes every 6 years, Down syndrome every 16 years, Turner syndrome every 60 years and haemophilia or Hirschsprung disease every 600 years! Hospitals may give a very false

impression of the pattern of illness in the community at large.

1.4 Children in society

1.4.1 Socioeconomic inequalities

Socioeconomic status is a key determinant of child health. The health and educational progress of a child is directly related to the home and the environment. The infant mortality rate in the most deprived areas of England is nearly twice that of the least deprived (see Figure 1.7), and a similar pattern is seen in child mortality rates and most other population health indicators. The disadvantage is there at birth and continues throughout childhood. In many developed countries, health inequalities have grown wider even as average health levels have improved.

The UK has one of the worst rates of child poverty in the industrialized world. The proportion of UK



RESOURCE

State of Child Health in the UK (<https://stateofchildhealth.rcpch.ac.uk>) summarizes key data.

The 'Child and Maternal Health' section of the Public Health England website (<https://fingertips.phe.org.uk>) enables you to explore and compare local data.



RESOURCE

See www.endchildpoverty.org.uk for more information.

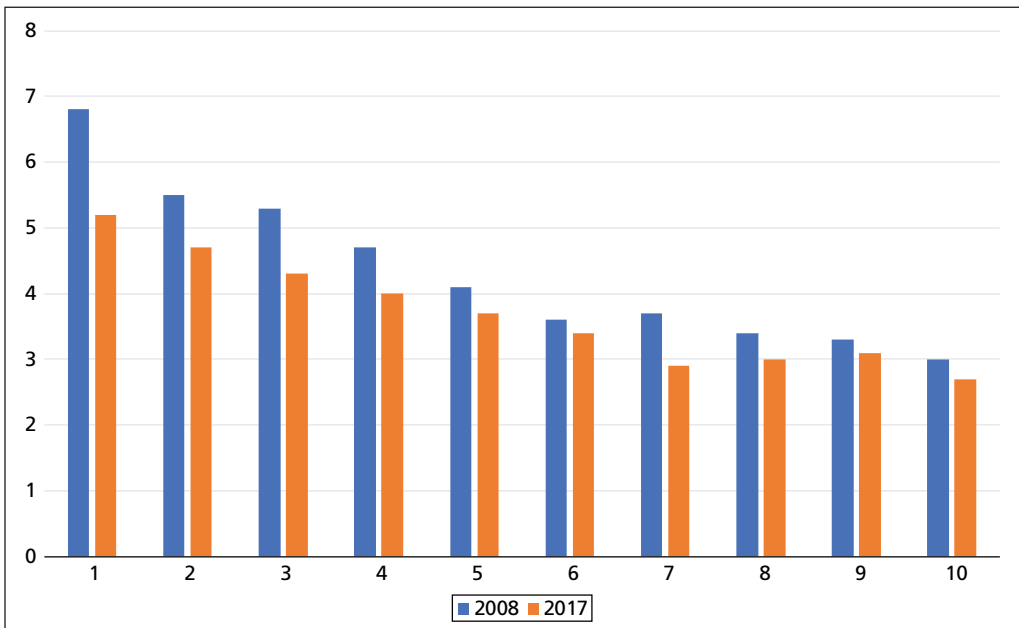


Figure 1.7 Infant mortality rates for most and least deprived areas in England, 2008 and 2017. Infant mortality rates are shown for the 10 deciles of the Index of Multiple Deprivation (1 is the most deprived, 10 is the least). Source: "Child and infant mortality in England and Wales: 2017", www.ons.gov.uk. Licensed under Open Government License v3.0.

children living in poverty has increased substantially over the last few decades to 30% (over four million children).

1.4.2 Changes in family structure

Family structure has become more fluid in the UK, reflecting changing societal attitudes to marriage, divorce and cohabitation. Children more often have to make transitions to new family structures. They are helped by: family stability; good relationships between partners; avoiding sustained exposure to conflict; and keeping children's needs paramount. Although marriage has declined and nearly 50% of births are now outside marriage, 7 out of 10 families are headed by a married or civil partner couple. Cohabiting couple families are increasing, along with step-family combinations. With more lone-parent families and families where both parents work, grandparents play a significant role in childcare (at least weekly for 25% of families); 22% of dependent children live in lone-parent families. Although UK teenage pregnancy rates have fallen recently, they are still among the highest across developed countries. Half of all teenage mothers live in the 20% most deprived areas.

Home factors that can adversely affect children's health and development include:

- Parental discord
 - Quarrelling
 - Separation and divorce
 - Domestic violence
- Parental illness
 - Death of a parent
 - Chronic disability
 - Physical illness
 - Mental illness
- Inability to cope with demands of parenting
- Abuse
- Financial hardship.

The complexity and multiplicity of the factors that cause a child to be disadvantaged sometimes make us feel helpless. However, since adversities compound one another, much may be achieved by modifying even one adverse factor.

Extensive medical and social services exist, particularly for handicapped children, but all too often they are best used by well-informed, middle-class parents, while the parents of the disadvantaged child do not use them sometimes because they do not know about them. All medical and paramedical staff have a duty to recognize children in need or in distress and to see that they benefit from the help that is available.



KEY POINTS

All children need:

- Self-esteem (we need to feel wanted)
- At least one good human relationship (we need to trust and feel trusted)
- Firm supervision and clear boundaries (we need rules).

A small change that helps to achieve one of these for a child may make a big difference.

Twenty percent of the world's population live in absolute poverty. Nearly half of them are children.

1.4.3 Ethnicity

Most countries have ethnic minority communities with particular needs. The UK continues to become more ethnically diverse. In the UK, 15% of the population (and one-third of newborns) are from ethnic minority groups. There is great regional variation. Consanguinity (marrying a blood relative) is more common in some cultures (e.g. some Muslim communities), increasing the risk of recessively inherited disease. Rickets is more common in some ethnic groups due to diet, pigmented skin and lack of exposure to sunlight. There remain significant health inequalities for many minority groups in Europe.

Find out about your own local situation and be aware of cultural and health differences. These range from what names to use, through to differences in patterns of disease, through travel (e.g. malaria), contact (e.g. tuberculosis) or racial susceptibility (e.g. sickle cell disease). Understanding the importance of racial background, family, cultural and religious beliefs improves paediatric care.

Ethnic composition (2011) – England and Wales

White	86%
Asian/Asian British	7.5%
Black/Black British	3.3%
Mixed	2.2%
Other	1%

1.4.4 Laws relating to the young

For legal and safeguarding purposes, a child remains a 'child' up to the age of 18. However, many laws become operative at other ages. School education is compulsory for children aged 5 and over.

Children under 10 (under 8 in Scotland) are not considered 'criminally responsible' for their misdeeds and may be dealt with by youth courts. The court can make (1) a care order giving parental rights to the local authority; or (2) a supervision order which may be administered by the social services department or, if the child is over 14, by the probation department. At the age of 15, children can be sent to youth custody.

Adult courts deal with those over the age of 17. Although it is legally possible to be sent to prison for a first offence at the age of 17, in practice it is rare before the age of 20.

1.4.5 Ethics and children's rights

In 1989, the United Nations declared that children worldwide should have special rights due to their immaturity and vulnerability. This Convention on the Rights of the Child sets out what every child needs for 'a safe, happy and fulfilled childhood'. These include the right to health, family life and to have his views taken seriously in matters affecting him. Consent and competence are covered later (Section 17.2). Once a child is deemed to be competent, then the doctor has the normal duty of confidentiality, including not disclosing information to a third party (including a parent). Sometimes, this has to be overridden because of safeguarding concerns, but this should be explained to the child.

Decisions about when to limit treatment

Situations where the withholding or withdrawal of life-prolonging treatment **might** be considered:

- Life limited in quantity – treatment unable or unlikely to prolong life significantly (including when death is imminent or inevitable, or in brain stem death);
- Life limited in quality – although treatment may prolong life, the burden of the underlying condition, or of the treatment, may be too great;
- Informed competent refusal of treatment – particularly where young people have capacity and parents and clinical team support the decision.

See the RCPCH Framework for Practice for more detailed discussion: <https://bit.ly/2vJ5clH> or via the RCPCH website www.rcpch.ac.uk.

A challenging part of intensive care (whether paediatric or neonatal) – and which sometimes makes headlines in the media – is the decision to withdraw life-prolonging treatment. Decisions should be made by the treating team in partnership with the parents, taking time to ensure all relevant information is considered, and what is in the best interests of the child.

1.5 Child health in the community

1.5.1 Health personnel

1.5.1.1 Community paediatricians

Most paediatricians have a commitment to some services outside of the hospital. Community paediatricians specialize in working outside of the hospital. They work closely with health visitors and the staff of child health clinics, and also with GPs, social and educational services. The boundary between hospital general paediatrics and community paediatrics is increasingly blurred. Community paediatricians often specialize in one or more of the following:

- Child health surveillance
- Provision of children's services to a specific geographical sector
- Learning problems and disability
- Child protection (child abuse)
- Audiology
- Adoption and fostering
- School health.

1.5.1.2 Health visitors (0–5 years)

These are registered nurses with additional training in health promotion and prevention of illness in all age groups. Many are attached to general practices and a few specialize (e.g. in diabetes) and have hospital attachments. They are responsible for family health and particularly for mothers and preschool children. Their job is to prevent illness and handicap by giving appropriate advice, by detecting problems early and by mobilizing services to deal with those problems. They have a key role in child health promotion.

1.5.1.3 School nurses (5–19 years)

School nurses provide a variety of school-based services:

- Confidential health advice for children and young people

- Sex education
- Developmental screening
- Health interviews
- Safeguarding advice
- Immunization programmes
- Working with schools to create a health-promoting environment
- Enuresis management.

In some areas, health visitor and school nursing roles may be integrated to a greater or lesser extent.

1.5.2 Health surveillance and promotion

1.5.2.1 Child health promotion

Child health promotion

Primary and secondary prevention of problems.

Child health surveillance

- Part of child health promotion
- Secondary prevention through early detection of existing problems.

The core child health promotion programme in the UK includes (Table 1.2):

- Childhood surveillance
- Immunizations
- A systematic process to assess the individual child's and family's needs
- Early interventions to address those needs
- Health promotion.

The aim is a flexible, targeted approach in partnership with parents, to ensure that all children's health and developmental needs are addressed. The programme is a combined undertaking, starting at birth with the postnatal check by the paediatrician or



PRACTICE POINT

- If a parent suspects a problem with their child, they are often right.
- Take the views and concerns of parents and other carers seriously.
- If in doubt, refer.
- Children at high risk of certain conditions may need additional screening tests.

midwife and then involving the primary health care team: health visitor, GP and later school nurses.

1.5.2.2 Child health clinics

These clinics aim to be readily accessible to young families. They are often in GP surgeries, but may also be located in health centres, village halls or purpose-built accommodation. They are staffed by health visitors and GPs. About 90% of babies attend such a clinic during their first year, but thereafter attendance falls off.

Functions

- Child health surveillance
- Routine medical and developmental examinations for infants and preschool children
- Immunization
- Health education
- Advice and support for those with special problems.

1.5.2.3 Personal child health record

Parents should be encouraged to take the 'red book' whenever the child attends clinic or hospital. It contains a permanent record of: child health surveillance; immunization; the child's growth (including centile charts); hospital visits; and health education and advice (Figure 1.8).



PRACTICE POINT

Whenever you see a young child, ask to see the red book. Thank the parent for bringing it.



Figure 1.8 Personal child health record ('the red book'). It is useful to refer to it during your history for further details about growth, development and immunizations.

Table 1.2 UK Child Health Promotion Programme

Age	Intervention (universal)	Intervention (progressive or targeted)
Antenatal	<ul style="list-style-type: none"> • Antenatal screening • Preliminary assessment of child and family needs • Preparation for parenthood • Advice on breastfeeding • Advice on general health and well-being <ul style="list-style-type: none"> • Healthy eating and weight • Smoking cessation • Plan transition from midwifery to health visiting service 	<ul style="list-style-type: none"> • Extra support and needs assessment for higher risk groups (at all stages below): <ul style="list-style-type: none"> • Young first time mothers • Learning difficulties • Drug and alcohol abuse • Domestic violence • Serious mental illness
Birth to 1 week	<ul style="list-style-type: none"> • Infant feeding support • General physical examination (Section 8.4.1) <ul style="list-style-type: none"> • Especially eyes, heart and hips • Vitamin K (im or drops) • Blood spot screening test (age 5–6 days) (Section 8.4.1). • Newborn hearing screen (within first month) • Assess child and family health needs • Give Personal Child Health Record • General information and support, e.g. SIDS advice (Section 16.3, p. 175), injury prevention 	<ul style="list-style-type: none"> • Immunization for at risk infants: <ul style="list-style-type: none"> • BCG • Hepatitis B • Advice on Healthy Start programme (including vitamin supplements) for low income groups • Extra support for infants with special problems (e.g. prematurity, low birth weight)
One to six weeks	<ul style="list-style-type: none"> • New baby review by 14 days (e.g. midwife, health visitor) and assess maternal mental health • Home safety advice 	<ul style="list-style-type: none"> • For children at risk of obesity <ul style="list-style-type: none"> • Advice on exercise and nutrition for whole family • Extra support for: <ul style="list-style-type: none"> • Maternal depression • Difficult parental relationship • Parental insensitivity to infant needs
Six weeks to six months	<ul style="list-style-type: none"> • General physical examination at 6–8 weeks <ul style="list-style-type: none"> • Especially eyes, heart and hips (and testes for boys) • Review growth • Immunizations at 2, 3 and 4 months (Table 15.1) • Review general progress • Deliver key messages about parenting and health promotion, e.g. promoting development, safety, SIDS • Weaning advice 	<ul style="list-style-type: none"> • Extra support for infants with special problems or parental issues as above • Smoking cessation interventions
Six months to one year	<ul style="list-style-type: none"> • Systematic assessment by health visiting team by one year: <ul style="list-style-type: none"> • Child's physical, emotional and social development • Family needs • Planning to address any needs and agree future contact with parents • Advice about dental health 	<ul style="list-style-type: none"> • As above
One to three years	<ul style="list-style-type: none"> • Immunizations at 12 and 13 months (Table 15.1) • 2–2.5 year review of health and development by health visiting team • Partnership with parents • Build on other contacts (e.g. immunization, visits to GP) • Dental health (avoid sugary food and drinks, teethbrushing) 	<ul style="list-style-type: none"> • Health or developmental problems to be referred early to specialist team • For children at risk of obesity <ul style="list-style-type: none"> • Advice on healthy eating, portion size and mealtime routines • Smoking cessation support

(Continued)

Table 1.2 (Continued)

Age	Intervention (universal)	Intervention (progressive or targeted)
3–5 years	<ul style="list-style-type: none"> • Immunization age 3 year 4 months (Table 15.1) • Review general progress • Deliver key messages about parenting and health promotion <p>Around time of school entry, check the following:</p> <ul style="list-style-type: none"> • Immunizations up-to-date • Access to primary and dental care • Appropriate interventions in place for physical, developmental or emotional problems • Child's height and weight • Hearing and vision test done 	<ul style="list-style-type: none"> • As above
Primary and secondary schools	<ul style="list-style-type: none"> • Access to school nurse through drop-in sessions or clinics <ul style="list-style-type: none"> • Self-referral • Parents • Teachers • Referral to specialists for children causing concern • In-school nursing care for some medical needs/disabilities • Heaf test age 10 to 14 years ± BCG • School-leaver immunization (Table 15.1) 	

Further details of the UK health promotion programme can be found in the Department of Health publication *Healthy Child Programme – pregnancy and the first five years*. 2009. This can be accessed at www.dh.gov.uk (search there for the title).

1.5.2.4 Health education and preparation for parenthood

During the final years at school and in the antenatal period, there are numerous opportunities for health education and training in *parentcraft*. Effective and

Key messages for parents

- Regular antenatal care
- Avoid smoking and alcohol during pregnancy
- Breastfeeding, and information on how to breastfeed or bottle-feed
- Reduce risk of sudden infant death syndrome (SIDS) (Chapter 16)
- Immunization
- The parent-held record (the red book)
- Good childhood nutrition
- Love, care, nurture and play
- Avoid parental smoking (respiratory disease in children)
- What action to take when your child is ill
- Reduce risks of accidents at home and on the road
- Good dental health.

UK Government objective

To reduce prevalence of smoking in pregnancy from 10.7 to 6% or less by 2022.

timely health promotion reduces foetal, infant and childhood morbidity and mortality.

1.5.2.5 Immunization

Immunization is a key part of the programme (Chapter 15).

1.5.3 Schools and nurseries

1.5.3.1 Preschool facilities

In the UK, all 3- and 4-year-olds are entitled to free part-time early education, which can be in school nurseries, day nurseries, playgroups or with approved childminders.

Nurseries or playgroups may be stand-alone or attached to primary schools. They aim to encourage a child's development and learning by play, stimulation

and physical activity. Infants and younger children may attend day nurseries, while their parents are at work or parent-toddler groups with a parent. Preschool facilities are particularly important for children from disadvantaged backgrounds. 'Sure Start programmes' develop facilities for these children and provide support for parents with young children.

1.5.3.2 Healthy schools

Children spend a large amount of time in school, and the school environment affects their health. The 'Healthy Schools' initiative programme in the UK encourages schools to take positive steps towards promoting children's health.

Promoting healthy schools

- Healthy eating;
- Physical activity;
- Personal, social and health education (PSHE);
- Emotional health and well-being.

Promotion of regular water-drinking and easy access to clean and well-maintained toilets reduces problems of constipation, urine infections and wetting.

1.6 Social aspects of child health and care

Disability Living Allowance (DLA)

- Care allowance from birth for levels of care in excess of those needed by healthy child
- Mobility allowance is available from the age of 5 years.

1.6.1 Parental responsibility

Both parents have legal 'parental responsibility' if they are married at the time of the child's birth or if both are registered on the birth certificate. Otherwise, the mother has parental responsibility, but there are legal mechanisms by which the father can acquire it.

1.6.2 Social services

The social services department of the local authority is responsible for the care and/or supervision of children up to 18 years if:

- Parents are unable to care for their children
 - e.g. illness, abuse
- No parent or carer for children
 - e.g. death of parent(s), child abandoned or lost.

In these situations, the local authority assumes parental rights in order to provide security and protection for the child.

Parental rights may be given to the local authority by the court (usually a family court or juvenile court), in which case a child is said to be the subject of a *care order*. The court must be satisfied that the child has suffered or is likely to suffer, significant harm because of the standard of parental care or because of being beyond parental control. 'Harm' includes ill-treatment, sexual abuse and the impairment of good physical and mental health and development.

The local authority tries to keep or place children with their own parents, relatives or friends. When this is not possible, the child is looked after by the local authority in:

- *Foster homes* (75%) in which a child is cared for in a family other than his own. There is an increasing number of schemes in which the foster parents are paid extra to look after children with physical and mental handicap or disturbed adolescents.
- *Residential placements*: Children's homes, residential schools and secure units (25%) aim to provide as normal an upbringing as possible. They contain a higher proportion of difficult or handicapped children than foster homes. Of children in these homes, 95% still have a living parent, so that many are visited regularly or may be reunited with their parents for weekends or longer periods.

Children may be supervised in their own homes, either on a voluntary basis or as a result of a court *supervision order*. The social worker's prime aim is to prevent family break-up and to help with problems of care, both physical and emotional. He or she works as part of a team with others involved with the family, e.g. health visitors, doctors and teachers.

The social services department is responsible for supervising children placed privately with foster parents. People who look after other people's children, whether on a day (child day-care, childminder) or residential (foster) basis, must register with their local social services department, even if they are paid directly by the parent. Social services also provide advice about financial benefits available from the Department of Health and Social Care.

Children Acts 1989 and 2004

The 1989 Act covered all aspects of the welfare and protection of children including day-care, fostering and adoption, child abuse and the consequences for children of marital breakdown. The spirit of the Act is reflected in the opening paragraphs:

- 'the child's welfare shall be the court's paramount consideration'
- 'any delay in determining the question (of the child's upbringing) is likely to prejudice the welfare of the child'
- 'a court shall have regard to ... the ascertainable wishes and feelings of the child concerned'.

The 2004 Act further developed the 1989 Act to improve child well-being and safety, including creation of a Children's Commissioner.

Both emphasize that all people and organizations who work with children have a responsibility for their safeguarding and well-being.

1.6.3 Voluntary services

The statutory services are supplemented by a large number of voluntary and charitable organizations, many of which were in existence before, and paved the way for, statutory provisions. Many of those offering services to children have a high level of professional expertise. The NSPCC (National Society for the Prevention of Cruelty to Children) and its Scottish counterpart continue their historic role of protecting children, and giving advice and support to families under stress. Barnardo's, the Children's Society and the National Children's Homes have adapted their activities to the changing pattern of child needs. The Save the Children Fund gives support to deprived inner cities in the UK as well as relief in developing countries. Many voluntary bodies receive some funding from central and/or local government.

1.6.3.1 Parent support groups

These exist for almost every chronic disorder of childhood (e.g. Cystic Fibrosis Trust). Their membership consists largely of parents of affected children who can offer advice to others from first-hand experience. They also raise money to support research, thereby augmenting the work of the major medical research charities.

1.6.3.2 The family fund

This gives financial help to less well-off families with very severely handicapped children. It is financed by

the Department of Health, but administered by the Rowntree Trust in York. Charitable organizations can often minimize bureaucracy and cut administrative costs and delays.

1.6.4 Adoption

Couples wishing to adopt a child approach their local authority who will assess suitability. The process includes medical assessment of the child and parents. Once adopted, the child is a full member of the family; he or she takes their name and has all the rights of a natural child. It is best for parents to inform their child from the beginning that they are adopted.

1.7 Children in hospital

Health care for children has changed dramatically in the last 70 years. Children were separated from their parents for long periods with little appreciation of their particular needs. The birth and development of paediatrics as a medical specialty were largely attributable to the first children's hospitals. Now, the special needs of children are recognized in the design and provision of services, e.g. unrestricted visiting, facilities for resident parents, play activities for younger children (Figure 1.9) and education for older children. Every effort is made to minimize a child's need to stay in hospital, including ambulatory care (where care traditionally provided in hospital is moved to a home-based model). This may include short-stay assessment units and outreach nursing. Infants account for nearly half of all paediatric admissions (Figure 1.10). The majority of admissions



Figure 1.9 Children in hospital. The play specialist plays a vital role.

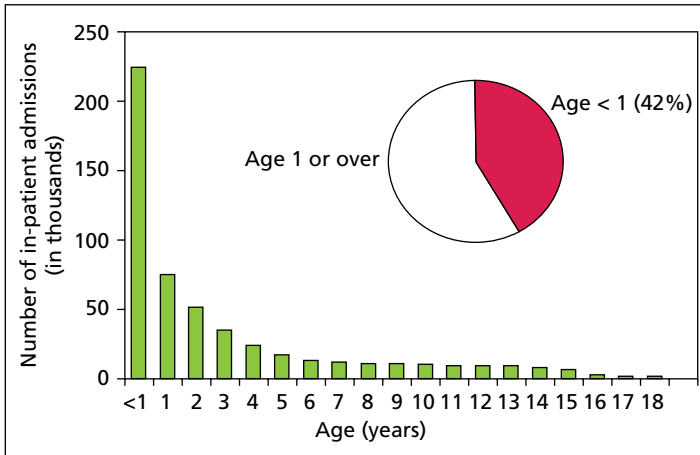


Figure 1.10 Number of paediatric in-patient admissions by age. Number of admissions per year in 1000s in the UK of children 0–18 years old. Source: Audit Commission 1993. Public Domain.

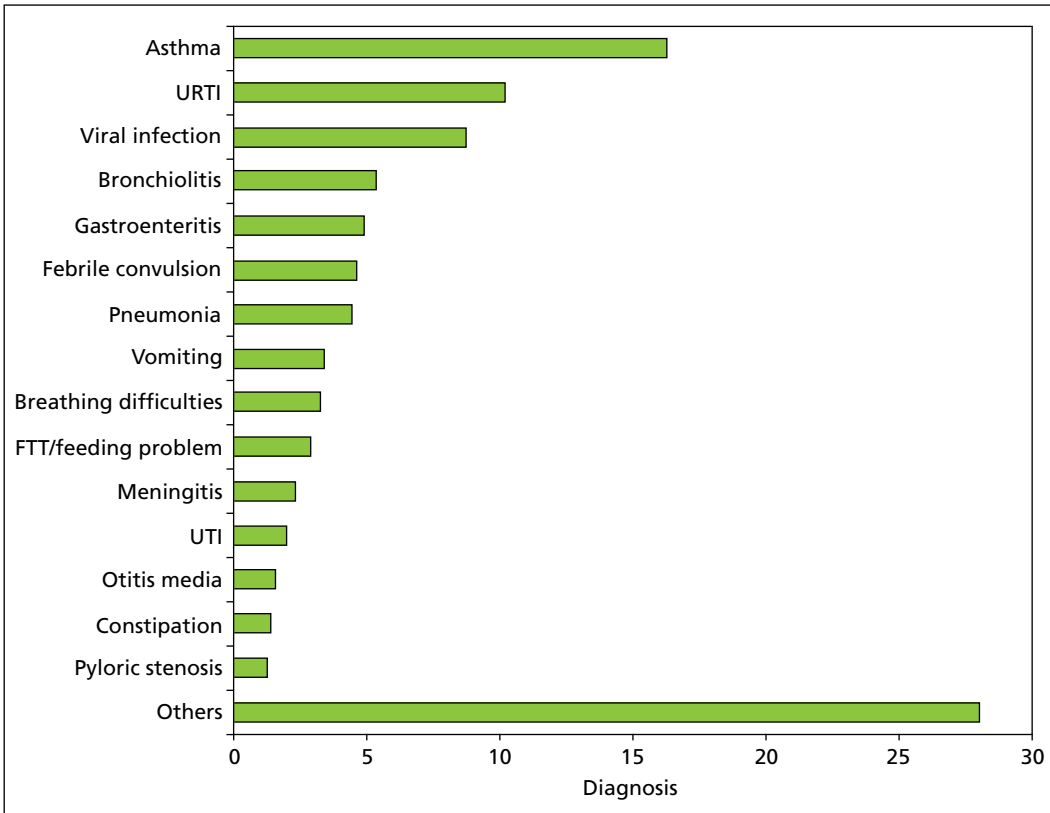


Figure 1.11 Causes of paediatric admissions. Based on a study of admissions to a District General Hospital. Respiratory problems (asthma, URTI, bronchiolitis, pneumonia and breathing difficulties) caused 57% of admissions, and infective illness 44%. FTT, failure to thrive; URTI, upper respiratory tract infection; UTI, urinary tract infection. Source: Based on Thakker, Y., Sheldon, T. A., Long, R., and MacFaul, R. (1994). Paediatric inpatient utilisation in a district general hospital. *Archives of Disease in Childhood* 70(6): 488–492. doi:10.1136/adc.70.6.488.

are due to respiratory conditions and infections (Figure 1.11).



PRACTICE POINT Infection control

Make sure you know and adhere to hand hygiene and other infection control guidance during your paediatric placement. This will not only protect children on the wards from cross-infection, but protect you too!

Hospitals are not without risk to patients, especially child patients. The hazard of cross-infection is obvious: the hazard of mother-child separation is less obvious but can be more serious, especially among the 1- to 4-year-olds. At this age, children are old enough to grieve for a lost mother, but not old enough to understand the reason, or that the separation is temporary. 'Tomorrow' has no meaning for a toddler.



PRACTICE POINT Patient safety

As in the rest of medicine, recognition of the potential for the process of care to cause harm has led to initiatives to make care safer. Some issues are the same as in adult care (for instance miscommunication, surgical process), while others are peculiar to paediatrics, such as certain prescribing challenges (Chapter 30), non-specific symptomatology in young children, who may suddenly 'crash'.

Paediatric patient safety initiatives include:

- Paediatric early warning score charts – these empower all involved to seek early review for patients who are deteriorating
- Safety 'huddles' to highlight particular ward issues
- Handover protocols to clearly identify ill patients, those with similar names, and those with safeguarding issues
- Drug prescribing – checks by pharmacists, alerts built into electronic systems
- Drug administration – e.g. nurses wearing red apron during this task are not disturbed
- Safety netting advice to parents on discharge
- Procedure checklists
- Quality improvement and learning culture; learning from adverse events and 'near – misses'.

Changes in hospital care

- The average stay in hospital is much shorter.
- There are similar numbers of medical and surgical admissions.
- More children are admitted – 1 in 4 by age 2 years, 1 in 3 by 4.5 years.
- Many medical and surgical procedures are done as day cases.
- Parents are actively involved in care.
- Outreach nursing teams and day assessment units reduce the need for admission.
- Neonatal care makes increasingly heavy demands on resources.

A young child separated from his mother may go through three stages:

Protest: he cries for her return.

Withdrawal: he curls up with a comfort blanket or toy and loses interest in food and play.

Denial: he appears happy, making indiscriminate friendships with everybody. This can be mistakenly interpreted as the child having 'settled', but the mother-child bond has been damaged and will have to be rebuilt. On returning home, he may exhibit tantrums, refuse food or wet his bed.

These problems can be avoided or minimized by:

- Avoiding hospital admission if possible
- Reducing the length of any admission to the minimum
- Performing operations (e.g. herniotomy, orchidopexy) and investigations (e.g. jejunal biopsy, colonoscopy) as day cases
- Encouraging parents to visit often and arranging for one to sleep alongside a young child.

Hospital organization can also help to reduce stress. Paediatric wards mean that children are looked after by staff specially trained and experienced in the care of children in a child-friendly environment. Teachers, nursery nurses and play leaders organize education and play. The first impression of a children's ward should be of happy chaos, rather than of the highly technical medicine, which is in fact going on.

1.8 Research and evidence-based medicine

Many of the remarkable improvements in health outcomes for children that you will read about in this book are due to research discoveries which have been implemented through an evidence-based medicine approach. No longer is it sufficient to adapt research in adult patients and treatments to children, whose conditions may have quite different underlying pathophysiology. Research networks, international collaborations and multicenter trials enable advances in care even in rare conditions. Follow the 'Research Trail' boxes in this book for a tour of some of the key research that has improved child health, primarily over the last 50 years. Perhaps you will make a contribution in the next 50...?



Research Trail:

Examples of research that have transformed child health

- The extended immunization programme has contributed to the global improvement in child mortality
- Infants put to sleep on their backs has hugely reduced SIDS
- Improvement in childhood cancer outcomes through multicenter trials, e.g. survival rates for acute lymphoblastic leukaemia have risen from around 20% to over 90%
- Cystic fibrosis care is on the verge of a new era due to new drugs that work on the membrane transporter protein
- Spina bifida is rare due to the discovery that folic acid supplementation in pregnancy prevents it
- Surfactant has transformed outcomes for preterm babies
- Prevention of HIV transmission from mother to baby has greatly improved outcomes
- Insulin therapy has revolutionized management of diabetes, and closed loop pumps are now in clinical use

Next Research Trail on page 70



Summary

Although most of this book will focus on illness and disease in children, the issues we have covered in this chapter are vital to understanding child health and need to underpin all your work with children and families. Most of the global burden of childhood disease is in developing countries, and the good news is that progress is being made to reduce this. Health inequalities are important to UK child health – if poverty could be eradicated, more than 1000 child deaths each year would be prevented. Health promotion is of great importance, as are the social aspects of child health. When you meet children and their families in hospital, a thoughtful, sensitive and child-friendly approach can transform a 'job to be done' into a positive and even therapeutic encounter.



FOR YOUR LOG

- Find out about child health statistics for your local area – in the UK go to <https://fingertips.phe.org.uk> and explore the child health profiles and data atlas.
- Discuss local child health issues with paediatric (and if accessible) public health staff.
- Look up parent support group websites for some of the conditions you come across – *Contact a family* is a good place to start (www.contact.org.uk).
- Visit a preschool or school catering for children with special health or learning needs if this can be organized within your course.
- Visit community health facilities and primary care – focusing on provision for children.
- Follow the 'Research Trail' in this book, and find out about local paediatric research.