short in relation to their peers and in comparison with their parents
growing slowly
relatively heavy for their height.

Outside the neonatal period, treatment is rarely urgent. Growth hormone is administered as a subcutaneous injection. It is expensive and difficult to store.

The causes of severe short stature include the following:
- secondary to chronic ill health or under-nutrition; these patients are often thin
- secondary to chronic emotional trauma; these patients are often thin
- endocrine (hypothyroid, hypopituitary, GHD, Cushing’s syndrome); these patients are often relatively heavy
- syndromic (e.g. Turner’s syndrome, etc.); these patients are usually dysmorphic, but some may have few external features, so it should be suspected in all short females outside their genetic range
- disproportionate with short limbs (bony dysplasias, rickets)
- metabolic (storage disorders, osteogenesis); these patients have longer limbs than back.

Short stature in the latter three causes is extremely difficult and expensive to treat.

Hypopituitarism
In the neonate there will be hypoadrenalism with or without GHD leading to hypoglycaemia. Suspect hypopituitarism in any male neonate with cryptoorchidism and micropenis.

Onset later in life may signal an intracranial lesion such as craniopharyngioma (which may be visible as a calcified mass on plain lateral skull X-ray or CT scan; MRI scans show a cystic cavity at the base of the brain). Symptoms outside the neonatal period include the following:
- poor growth/short stature (secondary to GHD)
- lethargy
- hypotension
- hypothermia
- hypothryroidism (see above)
- hypogonadism (see above)
- visual field defects, headache and/or raised intracranial pressure if secondary to tumour.

Treatment is outlined in the sections on individual hormone deficiencies above.

Diabetes insipidus
Isolated diabetes insipidus is rare, but it can occur as part of hypopituitarism or secondary to infiltration of the posterior pituitary by tumour or destruction by infection. Suspect it in any case of:
- dehydration with dilute (colourless) urine
- polyuria and polydipsia not due to diabetes mellitus
- secondary daytime wetting without an obvious cause
- familial history.

It is important to request a fluid balance diary at home, and for carers to allow access to water alone between meals as the only fluid permitted. This will help to identify the many behavioural causes of polydipsia, and will avoid the need for awkward and unnecessary tests of urinary concentrating capacity.

Diagnosis is confirmed by the simultaneous presence of hyperosmolar serum (> 290 mOsm/litre) and dilute urine (< 300 mOsm/litre or specific gravity < 1005).

Treat by allowing free access to water and, if possible, replacement of antidiuretic hormone with a long-acting analogue, DDAVP, which can be given intramuscularly, by nasal spray or orally. The dose is titrated to keep the specific gravity of the urine in the range 1005–1010 and/or the serum osmolarity normal. Try to allow one period of diuresis before each dose is due, to prevent dangerous hyponatraemia from over-treatment.

5.9 The child or adolescent with a mental health problem

**BOX 5.9.1 Minimum standards**
- Knowledge, skills and tests that exclude organic medical causes.
- Effective child protection systems.
- Fluoxetine.
- Risperidone, chlorpromazine and flupenthixol.
- Supportive family therapy.

**Introduction**

Around 10–20% of all children have one or more mental or behavioural problems (World Health Report 2001). The rates are higher in urban areas and increase in adolescence. One in ten young people suffers from mental illness or symptoms of mental distress severe enough to cause some level of impairment, yet less than one in five receives the treatment that they need.

Prematurity, poor nutritional status, low birth weight, organic brain damage and physical handicap often bring about biological stressors. A disadvantaged socio-economic status of families contributes negatively to the mental health of children. Child development suffers where there is persistent marital discord, parental psychiatric illness and/or a history of substance abuse. Protective factors include stable care, an adaptable and engaging personality, problem-solving abilities and a supportive network of family and friends.

The aggregate disease burden of these disorders has
not been estimated, and it is complex because many of these disorders can be precursors to much more disabling disorders during later life. Mental health disorders of childhood and adolescence are very costly to society in both human and financial terms.

Psychiatric disorders that arise in adolescence are different from those in children and similar to those in adults. The vulnerability of adolescence relates to difficulty in establishing an identity, during which there may be alienation from the parents. There is also intense emotional interaction with friends, which makes adolescents especially vulnerable to the effects of peer pressure, and issues of sexuality. Emotional disorders include anxiety states, depression, hysteria and specific phobias.

Conduct disorders occur in about the same proportion, and include conditions that range from oppositional defiant behaviour to persistent patterns of aggression and rule breaking. About 20% of the teenagers may present with a mixture of disorders.

The link between adverse family environmental factors and mental health disorders in children and adolescents is fundamental and must be explored as part of the assessment and treatment.

Acute psychiatric emergencies: suicide and deliberate self-harm

In well-resourced countries there has been a persistent rise in fatal suicide attempts, especially in young males. A history of substance abuse, conflict with the law and personal and mental illness are important factors. The possibility of abuse within (most likely) or outside the family must be at the forefront of a search for why this occurred, as there may be other children ‘at risk’. The method of suicide depends on the means available. Males are more likely to use violent means than females. Overdoses of drugs or poison, hanging and immolation are common methods of suicide.

Suicide is extremely rare in pre-pubescent children, but the frequency rises sharply during the teenage period. Again a search for evidence of abuse must be undertaken.

Deliberate self-harm is a non-fatal act in which a child or young person deliberately ingests noxious substances in excess of therapeutic doses, or causes self-injury. It is best interpreted as a ‘cry for help’. Again, the possibility of abuse must be considered in all cases.

Assessment and questions to be asked

- Are there any indicators or clinical signs of physical or sexual abuse?
- Have there been any previous attempts at suicide?
- Is there a risk of suicide or of a repeated attempt?
- Was a suicide note left?
- Was there pre-planning?
- How likely was the young person to be found?
- What was the method used?
- How lethal was the method used?
- Did the young person know how toxic the substance was?
- What quantity of the substance was taken?
- Was it impulsive in the context of a conflictual relationship?
- Was it to attract sympathy or seek attention (e.g. following a disciplinary crisis or the loss of a friend)?
- Is there a psychiatric disorder?
- What is the family and developmental history, including educational functioning?
- How well does the child solve problems and cope with difficulties?
- How effective and who are the social/parental supports, including adequacy of supervision?

It is important to clarify to the family (preferably in the presence of the child) that information given by the child is confidential.

High-risk factors

- Undiagnosed and unmanaged abuse.
- The risk of repetition is higher in the next 4 weeks after the attempt. It also increases if there is a history of previous self-harm attempts.
- Male gender.
- Lack of support, and easy access to a means of committing suicide (e.g. a firearm or drugs belonging to other family members in the home).
- Presence of depressive illness, with loss of sleep, appetite, depressed mood, agitation, and in particular continued suicidal ideas (hopelessness, inability to enjoy life, asking ‘What’s the point?’).

Treatment

- Treatment of the medical consequences of self-harm is the priority (see Section 7 especially Section 7.4).
- Assessment of the child and their family should be undertaken when the child is free from the after-effects of the drug overdose/self-inflicted injury.
- It is important to take the young person’s suicidal ideas seriously and not to expose them to sarcasm or ridicule in discussions. Assessment should include consideration of a mental illness and also of the family and social circumstances of the young person and the context in which the self-harm occurred.
- Nothing predicts behaviour better than past behaviour. Those with a low risk of repetition can be offered support during subsequent crises, and arrangements made to assist the child and their family in developing coping strategies. A psychologist, social worker or trained psychiatric nurse (if available) can assist the family in this way.
- If there is abuse, the child must be protected from further harm by arranging the involvement of social services and the police (as appropriate in the setting).
- Children at high risk of death need a major input, although inpatient facilities are generally sparse and often unavailable. Depending on resources (or lack of them) the physician needs to improvise and involve social agencies and the family (particularly the extended family if there are immediate parental problems) to provide appropriate supervision, support and treatment.
- Those with a history of substance abuse will need specific counselling.
- The presence of mental illness merits specific treatment (psychological therapies and/or medication) and intervention (see below). Issues that triggered the self-harm should be addressed if possible. Relationship difficulties should be borne in mind.
Depressive disorders
Depression is a recurring illness characterised by episodes of dysfunction. It is common, and has a lifetime prevalence in adults of 15–20%. It has been reported in 1% of preschool children, 2% of school-age children and 5–8% of adolescents; girls are twice as likely to suffer from depression as boys. The incidence is rising, or else depression is being recognised more, with each successive generation. It is detected at a younger age and there has been a parallel increase in suicide in the paediatric age group.

Sadness, unhappiness and misery are common childhood experiences (usually in reaction to adverse family circumstances), but when sadness is extreme in intensity and duration, it may be due to a depressive illness. Depression or depressive illness always needs urgent attention.

The presentation of depression varies with the age of the child. Infants and preschool children cannot express feelings of sadness in language. In this age group, depressive symptoms must be inferred from apathy, withdrawal from caregivers, delay or regression of developmental milestones, and failure to thrive that has no organic cause.

School-aged children are cognitively able to internalise family conflict, criticism or failure to achieve. They display low self-esteem and guilt, but depression is often mainly expressed in somatic complaints (headaches, stomach aches, disturbed sleep and appetite), anxiety (school phobia), excessive separation anxiety, irritability (temper tantrums and other behavioural problems) and academic decline.

Common symptoms in adolescents resemble adulthood depression, with more anger than sadness, hostility mainly towards family, sleep and appetite often normal, drug abuse, academic decline and suicide attempts. A depressed mood (dysphoria) is accompanied by loss of emotional involvement (withdrawal), feelings of guilt and unworthiness, and an inability to cope effectively. A ‘depressive disorder’ refers to an observable depressed mood, tearfulness, suicidal thoughts, disturbance of sleep and appetite, and a lack of energy.

When the above symptoms persist or occur despite an absence of adverse environmental causes, and functioning is impaired, a diagnosis of depressive illness can be considered. It is worth noting that around 40% of children with conduct (behaviour) disorders have associated mood disturbances, and that children presenting with depression may have other problems, such as anxiety or substance abuse.

Assessment
Assessment should include the child or adolescent and their family or other people who know the young person well. This may be impossible for the teenager who has no family, or for the older teenager who refuses to have their parents involved.

At the beginning of the assessment it is helpful to clarify the bounds of confidentiality. The parents and the child need to understand that what each of them says will not be freely shared without consent. However, it should also be made clear that there are limits to confidentiality in situations in which the law requires reporting, such as abuse, and also in situations where the child’s safety is at serious risk – for example, of suicide.

Assess the degree of dysfunction and distress that the symptoms are causing the child and their family.

Assessment requires a detailed history, mental state examination, play and observation of the child–parent interaction. A full medical examination and neuropsychological testing to rule out neurological or learning disorders and to assess the child’s developmental capabilities should be undertaken. Psychological assessment tests such as a strength and difficulty questionnaire may be helpful.

Risk factors
- A family history of depression predisposes to depression, and the children of depressed parents are three times more likely to develop depression themselves. Early onset in the parents is associated with a higher risk for the children.
- Family and social environmental risk factors include family conflicts, rejection, lack of communication, lack of expression of love, poor family support systems, abuse (physical, emotional or sexual), and parents who are excessively controlling.
- Adverse life events, such as the death of a parent or other loved one, parental divorce, exposure to suicide, relationship problems and academic failure can precipitate depression.
- Negative emotions such as low self-esteem, self-criticism, negative interpretation of life events and a feeling of lack of control can all contribute.
- The process of puberty can precipitate depression.

Issues in management
The diagnosis of a depressive illness (as opposed to transient sadness, which is very common) should be made only after careful history taking and information from the family, school and (if possible) close friends. Almost all ‘depression’ in children or adolescents is related to environmental factors, and a diagnosis of depressive illness should only be made when it is certain that environmental factors are not responsible.

In addition, and in older adolescents, bipolar disorder may present for the first time, and a history of symptoms of hypomania should always be undertaken. If such symptoms are elicited, a daily symptom diary may be helpful. There are specific drug treatments for bipolar disorder which include mood stabilisers, and the support of an adult psychiatrist can be very helpful.

Medical conditions that can present with depressive illness must be excluded, using appropriate investigations, in particular vitamin or mineral deficiencies (full blood count), thyroid dysfunction (TSH levels), tuberculosis (chest X-ray) and HIV infection.

If possible, address any stressful factors in the child’s environment.

Management of sadness
The opportunity to discuss their difficulties with a sympathetic and helpful listener can itself be very useful to a depressed child or adolescent. The depressed child will tend to blame him- or herself, and there should be an attempt to enable the child to deal with issues without such negative feelings.

It is important to explore sensitively any factors in the child’s life that may have led to the episode of self-harm, and to put the problems right as far as possible, while recognising that some situations cannot be changed.

Work to help the young person to understand him- or herself, identify feelings, change maladaptive patterns of
behaviour and improve relationships can be very helpful, and will provide useful skills for them later on in their life.

Consider the mental health of other members of the family, which may be having a significant effect on the child or adolescent. Helping the parents may help the child. Postnatal depression occurs in about 10% of mothers, and tends to recur with each pregnancy. Family therapy and support can also be very helpful.

Regular exercise (e.g. involvement in sport) can be very useful for some people with depression. It is also important to get enough sleep and to eat as healthy a diet as possible.

Formal “talking therapies” such as cognitive–behavioural therapy can be helpful, but they require specialist training and are not widely available, even in well-resourced countries.

Management of depressive illness
It is vital that the child or adolescent is informed that their symptoms and the effects of the symptoms on their behaviour and educational function are not due to anything they have done or are doing wrong. The young person and their family need to learn how to distinguish between the normal range of feelings and those, including sadness, that suggest the onset or presence of the depressive disorder.

In more severe forms of depressive illness, particularly in adolescents, antidepressants can be helpful, but in general their use is best avoided.

Antidepressant medication
The antidepressants of first choice for adolescents aged 12–18 years are selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine, which can be effective but are expensive. They should be prescribed following baseline measurements of blood pressure and heart rate, physical examination for extrapyramidal symptoms, etc. The suggested baseline laboratory investigations are complete blood count, liver function tests, pregnancy tests for girls, and ECG. The common side effects of SSRIs are dizziness, sweating, diarrhoea, headaches, fatigue, restlessness, initial insomnia, and weight loss or gain. Uncommon side effects may include delayed micturition, blurred vision, skin rashes, etc., and should be explained to the patient and their family.

Usually fluoxetine is best tolerated if given in the morning after breakfast, but in situations in which it causes drowsiness it can be taken in the evening. Changes in symptoms do not occur for at least 3–6 weeks. Follow-up must be insisted upon while the young person is on medication.

Suicidal feelings must be explored routinely at onset and at follow-up.

Fluoxetine: the starting dose in children aged 12 to 18 years is 10mg daily, and the dose may be increased to 20mg daily after 1–2 weeks. There is little information about the use of fluoxetine in children under 12 years of age.

Abrupt discontinuation of SSRIs may induce withdrawal symptoms, some of which mimic a relapse of a depressive episode (e.g. tiredness, irritability and severe somatic symptoms).

Once the patient has been free of symptoms and back to normal life for at least 8 weeks, fluoxetine should be continued for 6 months, then gradually reduced and stopped over a period of 6–12 weeks. The speed of reduction should be decided with the patient, taking into consideration any symptoms of withdrawal.

Tricyclic antidepressants have major side effects, including cardiovascular complications. They are also very dangerous in overdose. Therefore they must not be used.

Monoamine oxidase inhibitors (MAOIs) must not be used because of their dangers when taken with certain foods.

Hysterical conversion disorder
This is a subgroup of somatoform disorders. It refers to loss or alteration of physical functioning without organic cause. The child presents with physical symptoms which result in disability in the absence of consistent physical signs or evidence of a physical illness. The most frequent symptoms are pseudo-seizures, loss of sensation and loss of limb function. These are common in post-pubertal female adolescents. They usually arise when the adolescent is facing a predicament that they cannot resolve. This may be related to academic, family, interpersonal, sexual, abuse, religion or societal issues.

As well as a thorough history and interview, the assessment should include a full physical examination to assess symptoms that do not correlate with known neurological pathways (e.g. a gait that is inconsistent and varying). It is important to keep an open mind about the possibility of a physical problem which has not yet manifested itself, and reconsider this regularly.

Pseudo-seizures may occur in adolescents who also have epileptic seizures, and it may be difficult to distinguish between them and provide the correct treatment. A blood test taken within 20 minutes of an episode to measure serum prolactin levels (if facilities for this are available) can be useful for differentiating between pseudo-seizures (prolactin levels are normal) and epileptic seizures (prolactin levels are raised).

Once a psychiatric disorder has been diagnosed, the emphasis should move from medical investigations to amelioration of presenting symptoms and appropriate psychological intervention. The latter should incorporate “face-saving” formulae to allow the young person to come to terms with the absence of physical disease, but the presence of an illness which is ‘real’ as far as the young person is concerned. Whatever the cause, the disability and the impact on the young person’s life are real, and may be more difficult to manage than a physical illness with similar symptoms. This aspect of the disorder must be carefully explained to the family as well, in case they believe that the young person is faking an illness.

Drugs and alcohol: use and abuse
Drug use and availability have changed radically in the last decade or two. The substances abused depend on availability and supply. As children get older, the proportion who have ever tried drugs increases. Which drugs are illegal and which are socially acceptable vary between countries and among different groups of people in the same country, and the use of drugs by children and adolescents is influenced by this. A child’s abuse of drugs is contextual – that is, it depends on societal norms, family history, etc. Parental criminality or substance abuse increases the risk. Reliable data on drug abuse in children are scarce and not validated. However, there is increasing acceptance that the rates of drug use are increasing, particularly in inner-city areas among children who are deprived (e.g. ‘street children’).
Volatile substance abuse is common in children, but seldom persists into adulthood. Solvents are easily available (e.g. butane gas, lighter fuel, paint thinners, aerosols, etc.), and are most commonly abused through a plastic bag to maximise the effects.

Stimulants such as cocaine and amphetamines are taken in powder form, intranasally or injected. They produce elevation of mood, energy, a reduction in appetite and hallucinations.

Drugs may be used for pleasure, or to remove (however briefly) the pain of daily life. Many drug users live in very difficult conditions and/or have mental health problems in addition to their drug habit. Prostitution is often associated with drug use, trapping (mainly women) in a vicious cycle. There is also a strong association of substance abuse with conduct disorder. In conduct disorders there is a repetitive and persistent pattern of behaviour in which societal norms or rules are violated (e.g. fighting, bullying, cruelty to people and animals, destruction of property, stealing and deceit). Many drug abusers will take up crime to pay for their drugs.

Assessment
It is important to establish the extent, frequency and severity of drug abuse or dependence. In addition, information needs to be elicited concerning behavioural patterns, social competency, educational functioning, peer relationships and psychiatric status.

Physical examination should include a check for fresh injection marks, old scars or the physical sequelae of drug use.

Management
There are very few, if any, specialised treatment centres for children who abuse drugs. Treatment outcome will vary according to the chronicity and/or the substances abused. For example, only a limited impact is made on alcohol or marijuana abuse, whereas heroin or cocaine treatment programmes are more successful in reducing the use of these drugs.

Methadone as part of a well-controlled and structured treatment system is the most common approach to managing long-term opiate dependence. However, it is rarely available in resource-limited settings. The initial dose for children over 15 years of age is 10–20 mg daily, increasing by 10 mg/day until there are no signs of withdrawal or toxicity (the usual dose is 40–60 mg/day). Opiates can give rise to nausea and vomiting. Withdrawal symptoms include restlessness, irritability, and increased bowel activity with abdominal pain. Methadone treatment is not appropriate for those with a short history of opiate dependence.

Schizophrenia
This is a serious mental illness characterised by abnormalities of thinking, perception and emotion, usually first diagnosed in late adolescence, although rarely the onset can be seen in childhood. Consider the diagnosis if two or more of the following symptoms are present for 1 month or longer:● delusions: beliefs which are unshakeable● hallucinations: 80% of affected children have auditory hallucinations; visual hallucinations are more likely to be due to an organic medical disorder such as a brain tumour or poisoning● disorganised (incoherent) speech● grossly disorganised or catatonic behaviour● negative symptoms (flat affect).

The onset is usually insidious. Many children have pre-existing problems with social withdrawal, disruptive behaviour, developmental delay and language problems, and then go on to develop more florid symptoms such as hallucinations. Mood disorders may present with schizophrenic-like symptoms, and making the diagnosis may be difficult.

Assessment
Any diagnosis is dependent on detailed history taking and examination, and schizophrenia is no exception. To evaluate the progress, it is important to define the baseline symptoms, functioning and problems in various aspects of the young person’s life (i.e. education, family and social functioning).

Before a definitive diagnosis of schizophrenia is made, organic medical conditions must be excluded by the following tests. However, it has to be accepted that in resource-limited settings many of these tests will not be available: blood tests for haemoglobin, indices such as MCV (to rule out vitamin B12 deficiency), thyroid function, liver and renal function, heavy metals such as lead, mercury and arsenic, HIV indicators, the Wassermann reaction for syphilis, urine test for toxicology, an EEG to help to rule out temporal lobe epilepsy, and a CT scan of the brain.

Management
Children and adolescents with schizophrenia present a challenge as they are seriously ill, and often their social and educational progress is seriously disrupted. Treatment is difficult, and all management should be under the supervision of a psychiatrist (if available). Treatments aim to reduce the frequency of relapses and disability.

It is important to work closely with the family. Negative symptoms such as blunting of emotions, impoverished thinking and lack of motivation are particularly distressing to relatives. Furthermore, highly expressed emotions and negative feelings increase the risk of relapse. The family will need support and help to manage their child’s symptoms. The techniques for reducing highly expressed emotions require specialist training.

Pharmacological treatment to control symptoms is the important initial management. Psycho-educational, social, cognitive and family intervention programmes are important in long-term management. Oral neuroleptics provide the patient with a sense of control. Any adverse effects will quickly become apparent, but the medication must be administered daily and the patient may not always be compliant. Depot neuroleptics provide a way of enhancing compliance.

Atypical antipsychotic drugs are now the treatment of choice (if available), as they have less extrapyramidal side effects. Risperidone can be given to children over 12 years of age, starting at 2 mg per day and increasing by 1 mg per week to a maximum daily dose of 8 mg. Side effects include postural hypotension, weight gain, hyperglycaemia and mild extrapyramidal signs.

Standard antipsychotic drugs are more likely to be available in resource-limited settings. Standard antipsychotic treatment for acute schizophrenic symptoms is usually initiated with chlorpromazine. For children aged
12–18 years, start with oral treatment with 25 mg three times a day or 75 mg at night, and then gradually increase the doses until there is control of symptoms, usually achieved with a maximum dose of 100–300 mg daily. Premature changes in drug choice should be avoided, as the response time may be 30 days or more. Poor response may be due to an inadequate dose or poor compliance.

Depot medication is suitable for long-term treatment (flupenthixol by deep IM injection into the outer buttock or lateral thigh with a test dose of 20 mg, then after 7 days 20–40 mg repeated 3- to 4-weekly according to the response. The usual maintenance dose is 50 mg every 4 weeks to 300 mg every 2 weeks.

Side effects include extrapyramidal signs (Parkinsonism, dystonia, restlessness and tardive dyskinesia), hypoten-sion and less commonly neuroleptic malignant syndrome (hyperthermia, fluctuating consciousness, muscle rigidity and autonomic dysfunction).

Post-traumatic stress disorder (see also Section 1.23)

Introduction

Nearly all children and adolescents who have experienced catastrophic situations will initially display symptoms of psychological distress, including intrusive flashbacks of the stress event, nightmares, withdrawal and inability to concentrate, among others. Most children and adolescents will regain normal functioning once their basic survival needs are met, safety and security have been restored, and developmental opportunities have been regained, within the social, family and community context.

Post-traumatic stress disorder (PTSD) is a relatively new diagnostic category first officially created by DSM-III in 1980. Around 25–35% of those exposed to traumatic events develop PTSD. Individual differences in response to trauma depend on the following:

- stressor severity and degree of exposure to the stressor
- exposure to previous traumatic events
- the child’s perception of the event
- the child’s appraisal of the threat to their survival, and the degree of human accountability
- for younger children, the response and functioning of adults, particularly close family, around them can be important.

Anxiety disorders, abnormal grief reaction, somatic complaints and impairment in educational functioning can all occur.

Diagnostic criteria

The child has experienced an event that is outside the range of normal experience and that is life-threatening to them or to those close to them. There is persistent re-experiencing of the traumatic event – that is, distressing recollections, dreams or flashbacks.

There is avoidance of the stimuli associated with the trauma, and a range of signs of physiological arousal occur, such as difficulty in sleeping, irritability or poor concentration.

In younger children, repetitive play related to the trauma may be present. They may have frightening dreams that have no obvious content, and may regress in their development.

Assessment

It must first be established that the child has experienced a traumatic event that preceded the onset of the symptoms. The traumatic event may not necessarily lead to development of PTSD. Instead, the child may develop acute stress disorder or sadness.

When assessing the child, the interviewer will need to take account of the child’s maturation, and their verbal facility and functioning. Details of the traumatic event, the child’s perception of the event, and their response immediately and later, should be evaluated.

The differential diagnoses include obsessive-compulsive disorder, schizophrenia and anxiety disorder. Flashbacks may need to be distinguished from intrusive and unwanted thoughts that are unrelated to the traumatic event, which occur in obsessive-compulsive disorder.

Management of trauma-affected children (see also Section 1.23)

If possible, reuniting the child with their parents or other close relatives and restoring normal comforting routines is helpful.

Some children will require more specialised interventions to address their suffering and help to restore their flow of development. Immediately after traumatic events, activities and opportunities that allow children to talk about or otherwise express painful experiences and feelings (e.g. by physical and artistic expression) are most beneficial if facilitated by people whom the children know and trust, and have continued contact with.

The goals of psychological treatment are reduction of symptoms, development of coping skills, and helping the individual to gain a sense of well-being and control. Education and gradually increasing goal setting help the child to relax, solve problems and gradually achieve mastery over fearful thoughts. The help of a clinically trained psychologist or psychiatrist may be needed to plan the treatment.

Trauma counselling should never be provided unless an appropriate and sustained follow-up mechanism is guaranteed.

The psychosocial well-being of adults, particularly parents and caregivers, has a direct impact on that of children, and should therefore be addressed through concurrent parent-focused psychosocial interventions. The participation of children, and adults, in decisions that affect their lives has a positive effect on their mental health, empowers them, and helps them to regain control over their own lives.

Panic attacks

These are common in children and adolescents, and can mimic physical illnesses. Hyperventilation, sometimes with tetry, is a key feature, as well as the fear of ‘going crazy’ or dying. The best way of controlling such attacks is to explain the physiological features of panic to the child and their family, and to teach proper breathing techniques (namely to breathe slowly at a rate normal for the child’s age).

Preventive intervention

The promotion of mental health through a healthy lifestyle brought about by health education and life skills training has the potential to equip a young person for their journey through life. There is material available in the public domain on life skills training (e.g. on the WHO/UNICEF websites)
which has been used in many resource-limited and middle-income countries.

**Autism and autistic spectrum disorders**

This is a group of disorders with similar features, although an individual child may not display all of them, and the severity may vary. Autism becomes evident before 3 years of age, but children with other conditions that form part of the autistic spectrum may present later (e.g., at school age).

Autistic behaviour may occur as an isolated problem, or it may be a component of a number of childhood developmental disorders. It is important to consider these when assessing a child, in case intervention may help. Sensory deficits, particularly deafness, which may be hard to identify in a young child, are especially important in this respect. Children with hydrocephalus, metabolic disorders (e.g., phenylketonuria), hypothyroidism, fetal alcohol syndrome, tuberous sclerosis, neurofibromatosis, Down’s syndrome and other chromosomal disorders may exhibit features of autism.

Autistic children characteristically have difficulties with the following:

- social interaction and reciprocity
- language development and communication skills
- imagination and play
- rigid thinking
- restrictive and repetitive stereotypical patterns of behaviour, activities and interests.

**Social interaction**

Autistic children may make little or no eye contact. They may not be able to share experiences or to understand the feelings of others, or recognise clues to their feelings from their behaviour (e.g., that people who are crying are sad).

**Language and communication**

Young children with autism may not point to get attention or to show another person something. They may never develop any useful language, or they may have unusual speech with abnormal intonation, jumbled words, incomprehensible sounds, or repetition of the same words again and again (echolalia).

**Cognitive function**

Children with autism may have global cognitive impairment or general impairment but considerable skill in some areas (e.g., numbers, art).

**Rigid thinking and ritualistic behaviour**

Autistic children often have very structured repetitive play (e.g., organising objects in a certain pattern). They may persist much longer than usual in putting things in their mouths, or they may hold on to objects, moving and feeling them in their hands, for long periods. Routine is very important, and they are often very upset by any disruption, which may lead to outbursts of temper.

**Management**

There is no cure as yet for autism. Management focuses on encouraging the child to learn as much as possible and to develop behaviour that helps him or her to live happily within the family and community.

Support for the family in caring for these children, who can be very challenging, is essential. Education for the family and community about the difficulties of autistic children, so that their behaviour is not misinterpreted as naughtiness, or caregivers criticised inappropriately, is also very important. Healthcare professionals and teachers experienced in the care of children with autism can give a great deal of assistance to families.

Vigilance for other problems, especially with hearing or vision, which if undiagnosed will add to the child’s difficulties, should be maintained.

For some children with autism who have severe aggressive behaviour and only under expert supervision consider risperidone:

- **Child over 5 years and 15–20 kg:** 250 micrograms daily increased if necessary after at least 4 days to 500 micrograms daily; thereafter increased by 250 micrograms daily at 2-week intervals to maximum of 1 mg daily
- **Child over 5 years and over 20 kg:** 500 micrograms daily increased if necessary after at least 4 days to 1 mg daily; thereafter increased by 500 micrograms daily at 2-week intervals; max. daily dose 2.5 mg if under 45 kg; maximum daily dose 3 mg if over 45 kg.

Review effectiveness and side effects after 3–4 weeks; stop if no response at 6 weeks.

**Asperger’s syndrome**

Asperger’s syndrome is usually identified later than autism, often when children are at school, and are recognised as different from their peers. They may be bullied and very lonely, as they long to have friends and ‘fit in’, but do not have the social skills to enable them to do so.

Like autism, there is no cure for Asperger’s, but teaching from as early an age as possible about appropriate behaviour can help these children. Education for their families and communities, so that they understand that the child has a condition which makes it hard for him or her to pick up social clues, is not just being difficult, along with appreciation of any special talents, is essential. If it is acceptable to the child or adolescent, written information to give to people to explain what they find hard may be useful.

**Attention deficit hyperactivity disorder (ADHD)**

Children with ADHD characteristically have difficulties with the following:

- inattention
- hyperactivity
- impulsivity.

These features must be present before the age of 6–7 years, evident in more than one situation (e.g., at home and at school), and interfere with the child’s social or educational functioning.
These characteristics may persist into adult life, resulting in inattentive and disorganised or impulsive risk-taking behaviour.

**Inattention**
Children with ADHD cannot concentrate for very long, especially on tasks they have been given which have no immediate reward (e.g. schoolwork).

**Hyperactivity**
These children are always on the move. Young children with ADHD may run, jump, climb, make a lot of noise and never settle to anything. School-age children and adolescents have difficulty sitting still, and may be constantly tapping their feet, wriggling and fidgeting.

**Impulsivity**
Children with ADHD do not think before they act. They may have accidents or get into trouble for recklessness.

**Other problems**
Children with ADHD can be exhausting. They are often in trouble because they are so active and may have poor relationships with other children and adults, and low self-esteem. They may sleep badly, struggling to get to sleep or waking frequently, and be poor eaters because they cannot sit still for long enough to finish a meal.

**Causes**
There is no known cause of ADHD. Some of the contributory factors include the following:
- genetic: parents or siblings affected
- living conditions: ADHD is more common in children from disadvantaged backgrounds
- depression in the child’s mother
- these factors may all interact.

In addition to occurring alone, the features of ADHD may be seen in young people with neurological conditions such as head injuries, fetal alcohol syndrome, encephalitis and some syndromes, such as fragile X syndrome, Williams’ syndrome and tuberous sclerosis.

**Comorbidities**
Children with ADHD often have additional problems, such as mild cognitive impairment, delayed language development, poor coordination, reading difficulties and mood disorders.

**Assessment**
- Developmental history, especially any delay and when noted.
- Pregnancy and birth, including any exposure to drugs or alcohol.
- Family history of similar problems, maternal depression and social circumstances.
- Educational progress: both intelligent children and children with specific learning difficulties who are bored can be disruptive.
- The parents’ expectations of the child and their response to his or her behaviour.
- Medical history and examination for neurological problems, including any medication being taken by the child that might affect his or her behaviour.
- Careful observation of the child in several settings, including home and school.

**Management**
There is no cure for ADHD, but careful management can help these children and their families a great deal.
- Look for any health problems that might be contributing to the condition and could be treated (e.g. large tonsils and adenoids preventing undisturbed sleep).
- Explain to the child and their family that they have a disorder that affects their behaviour, and that they are not just a naughty child.
- The most useful management is behavioural.
- Drugs may be helpful in severe cases.

**Behavioural management**
Children with ADHD do best where there are as few distractions as possible around them, and where there are clear rules about the conduct that is expected, with praise or reproof given immediately if merited. When doing tasks such as schoolwork, they are best on their own or in a small group, sitting near to the person in charge. They often have low self-esteem. Giving praise when they do well, with frequent small rewards, is very helpful.

**Drugs**
The most widely used drugs for ADHD are stimulants such as methylphenidate (Ritalin), which can be given to children aged over 6 years in a dose of 5 mg once or twice daily, increasing by 2.5–5 mg weekly up to a maximum daily dose of 60 mg. If methylphenidate has not made any difference after 3 weeks at full dose it should be stopped. Slow-release preparations are also available and can be given less frequently. If effect wears off in the evening (with rebound hyperactivity) a dose at bedtime may be appropriate (establish need with trial bedtime dose). Careful supervision is needed, and ideally children who require these drugs should be treated by a professional experienced in their use.

**Some useful websites**
Royal College of Psychiatrists Fact Sheets for Children and Young People. www.rcpsych.ac.uk/healthadvice/parentsandyouthinfo.aspx