Child health surveillance for psychiatric disorder: practical guidelines

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Children who have a psychiatric disorder are often seen as difficult rather than disturbed and the significance of the emotion or the behaviour may easily be missed. The distinction between 'normal' and pathological behaviour is important because reassurance is appropriate in the first case and dangerous in the latter.

A psychiatric disorder can be classified as a change in behaviour, emotions, or thought processes (the three main aspects of mental functioning), which is so prolonged and/or so severe that it interferes with everyday life and is a handicap for the child or those who care for the child. The child's stage of development and the sociocultural context in which the disorder occurs must also be taken into account (table 1). Rarely, a child's mental state may be so bizarre or extreme that it only has to occur once to be regarded as abnormal. Deliberate self injury, delusions, or hallucinations are good examples of this.

Child psychiatric disorder, as defined above, has a one year prevalence rate of roughly 10% in the general population, which is much the same as it is for adults. This rate is influenced by a number of risk and protective factors.

**Risk factors for child psychiatric disorder**

Surveillance for psychiatric disorder is assisted by the knowledge of the main factors that increase the risk. The most significant influences that put a child at risk are given in table 2. Most children with a psychiatric disorder will have been unfavourably influenced by more than just a single risk factor. Each of the risk factors interacts with others in such a way that the total adversity is more than the sum of the individual factors. Thus, a 10 year old boy with epilepsy and learning difficulties may have no problems until he is teased for being slow at school resulting in a low self esteem, which in turn interferes with his motivation to learn.

The cumulative effect of stress can have a potent negative influence on children. Children who have experienced more than two adverse life events in the recent past are particularly susceptible to develop emotional or behavioural problems. There is evidence that some life stress factors may lie dormant for many years (the sleeper effect) only to have an effect when 'awoken' by a related adverse experience. This increased vulnerability to stress may be seen in the abnormal behaviour of some teenagers who have been sexually abused or subjected to other detrimental influences much earlier in their childhood.

Boys are generally more prone to develop psychiatric disorder in much the same way that they are more vulnerable to almost every life adversity. The difference in the rate of psychiatric disorders in girls and boys tends to be less marked in preschool children. But during adolescence, girls become more vulnerable, which is mainly due to higher rates of emotional disorder. Throughout childhood, boys are more likely to experience developmental disorders, behaviour problems, and conduct disorder.

Family risk factors are especially complex with a multitude of possible interactions (table 3). Family breakdown is a good example of a process of adverse events and interactions that multiply the risk of psychopathology. Thus, children from a broken home may copy the parental model of unsatisfactory relationships and poor communication, and become increasingly difficult to manage. The child's

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**Table 1** Definition of childhood psychiatric disorder

- A change in the child's usual behaviour, emotion, or thoughts
- Persistent - for at least two weeks
- Severe enough to interfere with the child's everyday life
- A handicap to the child and/or the carers
- Taking account of the child's stage of development
- Taking account of the sociocultural context

**Table 2** Child risk factors for psychiatric disorder

- Low IQ – as high as 40% risk with severe learning difficulties
- Difficult temperament
- Physical illness
- 20% + risk with epilepsy
- Slight increased risk with most other illness
- Specific developmental delay
- Communication difficulty
- Academic failure
- Low self esteem

**Table 3** Family factors that increase the risk of psychiatric disorder

- Family breakdown
- Maternal mental ill health
- Paternal criminality, alcoholism, psychopathy
- Abuse
- Inconsistent, unclear, or critical discipline
- Poverty - whatever the cause
- Death and loss - including loss of friendships
- Hostile and rejecting relationships
- Overt parental conflict
- Failure to adapt to child's developmental needs
behaviour is then likely to lead to critical and hostile parental responses that only serve to make the child more disturbed. This results in a prevalence rate of psychiatric disorder as high as 80% in the first year after divorce. The frequency of childhood psychiatric disorder is also raised before and for many years after parental separation. This contrasts with loss of a parent by death where the risk of psychiatric disorder is only slightly increased.

Maternal, but not paternal mental illness increases the risk of psychiatric disorder. A child’s vulnerability to a depressed mother may be increased during critical periods of development, for example during the time when the mother is bonding to the child in the first few weeks after birth. There is also evidence that some children continue to have problems even after the mother’s depression has resolved, suggesting that a process of negative behaviour has been established that becomes difficult to disentangle. Very young children are strongly influenced by the mood of their parents, but as they grow older, other factors such as school, peers, and culture have a more powerful effect. Children spend some 15000 hours in school. It is therefore no surprise to find that experiences at school, such as bullying, school organisation, and academic achievement can influence the rate of childhood psychiatric disorder (table 4).

Protective factors for child psychiatric disorder
The risk factors outlined above are common to many children and yet only a minority at any one time actually suffer from a formal psychiatric disorder. So why do some children survive and not develop a psychiatric disorder even though they have many adversities stacked up against them? One of the most powerful protective factor of all is a positive self esteem. Self image develops slowly and becomes relatively fixed by 7–8 years of age. It is crucially dependent on how parents and others have responded to the child. The presence of an affectionate and trusting relationship with an adult is therefore also protective. A stable temperament and a good level of intelligence will help a child adapt to stressful situations and reduce the risk of psychiatric disorder (table 5).

Assessment
The evaluation of psychiatric disorder in very young children may seem to be inappropriate as thoughts and feelings are still developing and rapidly changing in this age group.

Table 4 External factors that increase the risk of psychiatric disorder

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<tr>
<th>Factor</th>
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<tr>
<td>School</td>
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<tr>
<td>Poor organisation and unclear discipline</td>
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<tr>
<td>Lack of awareness of children as individuals</td>
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<td>High teacher turnover, low morale</td>
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<td>Sociocultural influences</td>
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<td>Peer group pressure</td>
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<td>Bullying</td>
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<td>Social deprivation</td>
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Table 5 Factors that protect against psychiatric disorder

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<tr>
<th>Factor</th>
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<tr>
<td>Positive self image</td>
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<td>Affectionate relationships</td>
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<td>Supportive relationships with adults</td>
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<tr>
<td>Stable personality</td>
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<tr>
<td>Having a special skill</td>
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<tr>
<td>High IQ and academic achievement</td>
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<tr>
<td>Parents who give high levels of supervision and clear discipline</td>
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Nevertheless, preschool children do experience strong emotions that they communicate most expressively with their behaviour and their play. Thus, surveillance assessment of young children will have to focus most carefully on how the child behaves in various situations. An additional complicating factor in the assessment of younger children is that they tend to reflect the moods and attitudes of their main carer. The child-parent relationship and the mental state of the parent therefore forms an important part of the assessment for psychiatric disorder.

Assessing children and their relationships is a complex process in which the observations of parents and teachers must play a major part. Information about the child has to be gathered from as many sources as possible. Even so, a child’s disturbance is often situation specific, with reports of problem behaviour in one setting only. Psychiatric disorders that are manifest in one situation only do not necessarily mean that cause of the problem must also be there: a child may be difficult at home due to academic failure at school or present major problems at school due to abuse at home.

The assessment process must therefore take account of the context in which the problems occur and note how each aetiological factor interacts with the others to generate the problem. It is helpful to start by considering the contribution that the child makes to the development of the disorder and then to go on to review the role of the family and finally the influence of school and the outside world as outlined in tables 2–5.

SCREENING FOR PSYCHIATRIC DISORDER
Parents and teachers will always be a major source of information, but as children grow older it becomes increasingly relevant to obtain details from children themselves. Below the age of 7–8 years most children find it difficult to report their own feelings or to give a considered view of how they perceive the world. Nevertheless it is always worth while directly questioning younger children to see what they have to say, provided that this is put in a developmental context. Accordingly, whatever the age of the child, it is important to use direct observation and questioning of the child, rather than to rely solely on the reports of others.

Questionnaires and rating scales can be used to screen children for psychiatric disorder. These are mostly aimed at parents and teachers, but new scales are now being developed for older children to rate their own symptoms. On the face of it, questionnaires
might seem to be the answer to the problem of screening large numbers of children for psychiatric disorder, but caution is required as all scales are subject to error and throw up both false positive and false negative results.

Young children can be assessed on the Preschool Behaviour Questionnaire of McGuire and Richman. School-age children can be screened with the Rutter A (parents) and the Rutter B (teachers) scales, which measure common emotional and behavioural problems. Both checklists are well established as properly validated and reliable scales. They are short and easy to administer. A longer, but equally well established schedule is the Child Behaviour Checklist of Achenbach and Edelbrock.

EARLY SIGNS OF PSYCHIATRIC DISORDER

Adverse temperamental characteristics can be recognised soon after birth and are associated with a significant increase in the risk of behaviour problems developing at a later stage. Other qualities, such as the appearance and gender of the child will also play a part in determining parental perceptions and responses. The seeds for future parent-child relationship problems may be sown during this early stage, but it is important not to see these early experiences as fixed and unresponsive to outside influences.

The risk of poor early child care and parent-child relationship problems is increased if the mother has received poor child care herself. A parent who required special schooling for learning difficulties as a child, and very young parents, are also likely to find child care a problem. Fortunately, deficiencies in mothering can be compensated for by a supportive father or other caring adult (table 6).

Although it is vital not to assume that there will inevitably be problems if one or more risk factors are present, careful surveillance should be maintained until it is clear that good progress is being made. Direct observations of parental behaviour with the baby is more reliable than what parents actually say. Surveillance in the first few weeks should therefore focus on parent-child interactions and should particularly note the parental responses shown in table 7.

**Table 6 Factors that make child care more difficult**

- Poor parenting experience as a child
- Teenage pregnancy
- Poor parental relationship
- Lack of paternal involvement
- Limited intellectual ability (IQ <70)
- Maternal depression
- Persistent rejection of the child after the first three months
- Unsupported single parent

**Table 7 Checklist for assessing parenting of very young children**

- Feeding
- Attending to basic child care tasks
- Playing with and talking to the baby
- Responding to distress and crying
- Protecting from danger
- Showing affection

Any problem that might be noted in the parent-child relationship at this early stage is not necessarily serious. Most parents will resolve any difficulties within a few months. But this early period is a critical time when support and encouragement for the more vulnerable parents can be especially effective.

**THE PRESCHOOL CHILD**

The range of emotional and behavioural symptoms is relatively limited in the preschool years. At this stage of rapid maturation any emotional or physical stress will cause obvious regression to more immature behaviour. It is therefore important not to be overimpressed by the apparently dramatic appearance of regressive behaviour during a physical illness, or with emotional distress or excitement. However, the behaviour should return to normal within a period of days or weeks once the stress is removed. A sound knowledge of child development is necessary in order to put any immaturity in perspective in order to distinguish between generally delayed development, specific developmental delay, and regression.

On starting primary school a child should have reached a reasonable level of social acceptability and at this stage, psychiatric disorders tend to present as immature behaviour. The main areas for psychiatric surveillance in preschool children are shown in table 8.

Emotional and behavioural disorders in preschool children are relatively non-specific and the range of normal behaviour is so great that it is often difficult to decide what is abnormal. It is best to adopt a pragmatic approach to diagnosing psychiatric disorder in preschool children and it may help to pose the simple question: Is the child's reaction 'out of proportion' to what might normally be expected in the circumstances and is the child or the carer handicapped as a result?

**THE SCHOOL-AGE CHILD**

The role of parents and the family in generating psychiatric disorder is crucial in younger children. But as children grow older, other factors gradually grow more important and the influence of the school and of other children becomes relatively greater. Surveillance at this stage needs to take into account what is happening at school and events outside the family in addition to the dynamics of the family itself.

Starting school is an important maturational experience. Children are assessed on their own merits in a more critical and detached way than most parents find possible. This may lead to temporary difficulties such as separation
problems or disobedience. Appropriate management at school in liaison with the child's home should bring about a rapid resolution, thus distinguishing these transient difficulties from a more serious psychiatric disorder.

Young children are remarkably resilient, but as they grow older and become more self aware they are increasingly influenced by the attitudes of others. By 8 years old most children have a reasonably clear view of themselves and how they compare with other youngsters. At this age, a child can develop a sense of failure and a low self esteem, which will greatly increase the risk of emotional and behavioural problems.

Regression and immature behaviour are relatively more significant if they occur in older children. For example, enuresis in children older than 7 or 8 years is likely to result in low self esteem, thereby making the child more vulnerable to failure in other areas of functioning such as school work.

Overactivity is another symptom that has added seriousness when it occurs in school age children. Inattentiveness and distractibility will interfere with learning, which in turn may provoke negative responses from teachers and other children. This can quickly result in a vicious cycle of failure, distress, opting out, and disruptive behaviour.

Surveillance for emotional and behavioural disorders in school age children should include factors that have been considered for younger children, but should also focus on more subtle areas of functioning such as how the child manages relationships, the child's self perception, and ability to control impulses. Academic achievement has a critical role at this stage, so ability to concentrate, read, and write at an age appropriate level will strongly influence a child's mental state (see table 9).

SYMPTOMS THAT INDICATE SERIOUS PSYCHOPATHOLOGY

The majority of psychiatric conditions in childhood are disorders of mental functioning and not illnesses. The distinction being that a disorder is an exaggeration of normal symptoms to the point that they become handicapping — a quantitative difference — and an illness is qualitatively different from normality. Thus, most emotional and behavioural symptoms are relatively non-specific and the presence of a single symptom will give little intimation as to the seriousness of the underlying psychopathology. It is the pattern of associated symptoms and the context in which they occur that gives a better indication. However, there are a few symptoms that are strongly associated with significant psychiatric disorder, even when they occur in isolation. These symptoms are listed in table 10 and should always be seen as having potentially serious implications, warranting detailed assessment and careful management.

<table>
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<tr>
<th>Table 10: Checklist of potentially serious symptoms</th>
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<tr>
<td>Persistent deliberate destructiveness</td>
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<td>Aggression leading to injury</td>
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<tr>
<td>Deliberate self harm</td>
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<tr>
<td>Age inappropriate sexual behaviour</td>
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<tr>
<td>Fire setting</td>
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<tr>
<td>Social disinherition</td>
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<tr>
<td>Persistent isolation and withdrawal</td>
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<tr>
<td>Bizarre behaviour</td>
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<tr>
<td>Hallucinations and delusions</td>
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<thead>
<tr>
<th>Table 11: Disorders with a generally poor outlook</th>
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<tbody>
<tr>
<td>Persistent aggressive behaviour after the age of 6-7 years</td>
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<tr>
<td>Hyperactivity associated with conduct disorder</td>
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<tr>
<td>Severe, persistent depressive disorder</td>
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<tr>
<td>Bizarre behaviour</td>
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<tr>
<td>Child abuse associated with low self esteem</td>
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<tr>
<td>Persistent truancy, especially from primary school</td>
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<td>Repeated running away or suicidal attempts</td>
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SYMPTOMS WITH A PARTICULARLY POOR PROGNOSIS

The serious symptoms of mental dysfunction listed in table 10 are indicative of significant psychopathology, but not necessarily a poor prognosis if appropriate treatment is provided at an early stage. There are, however, a few specific symptoms of childhood that have a particularly poor long term prognosis; these are listed in table 11.

AFTER SURVEILLANCE — WHAT THEN?

A successful surveillance programme will identify a large number of children with psychiatric disorder. An awareness of their distress is only helpful if it leads to positive help and support. The issue of what to do with identified children needs to be agreed and planned well before any surveillance programme is commenced. A series of decisions have to be made so that the most seriously disturbed children are provided with appropriate treatment. At the same time it is necessary to avoid labelling children as disturbed if the disorder is mild or likely to be transient. The flow chart suggests the decision making steps and responses that can be taken as part of the surveillance process.

Conclusions

The surveillance of mental health problems in children is a complex matter and has to take a wide range of different factors into account. An overall rate for psychiatric disorder of 7–14% can be expected in the general child population. This means that a large number of children will be identified in the surveillance process. However, not all these children will require formal psychiatric assessment and treatment. Many can be helped by their parents and by appropriately skilled professionals. Informal psychiatric advice may be helpful at an early stage before a problem has
Flow chart for child health surveillance: emotional and behavioural problems.

become firmly established. Close collaboration with colleagues in the child psychiatry service is therefore important.


Further reading