

## Chapter 10

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# Mental health problems in children and young people

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## Key statistics

- The British Child and Adolescent Mental Health Surveys in 1999 and 2004 found that 1 in 10 children and young people under the age of 16 had a diagnosable mental disorder. Among the 5 to 10 year olds, 10% of boys and 5% of girls had a mental health problem while among the 11 to 16 year olds the prevalence was 13% for boys and 10% for girls.<sup>2,3</sup>
- The most common problems are conduct disorders, attention deficit hyperactivity disorder (ADHD), emotional disorders (anxiety and depression) and autism spectrum disorders.<sup>2,3</sup>
- Rates of mental health problems in children and young people in the UK rose over the period from 1974 to 1999, particularly conduct and emotional disorders.<sup>9</sup> In the absence of more recent data, it is unknown whether this trend has continued.
- Mental health problems in children and young people cause distress and can have wide-ranging effects, including impacts on educational attainment and social relationships, as well as affecting life chances and physical health.<sup>13,14</sup>
- Mental health problems in children and young people can be long-lasting. It is known that 50% of mental illness in adult life (excluding dementia) starts before age 15 and 75% by age 18.<sup>20</sup> In addition, there are well-identified increased physical health problems associated with mental health.<sup>15-18</sup>
- There are strong links between mental health problems in children and young people and social disadvantage, with children and young people in the poorest households three times more likely to have a mental health problem than those growing up in better-off homes.<sup>3</sup>
- Parental mental illness is associated with increased rates of mental health problems in children and young people, with an estimated one-third to two-thirds of children and young people whose parents have a mental health problem experiencing difficulties themselves.<sup>24,25,57</sup>
- Mental health problems in children and young people are associated with excess costs estimated as being between £11,030 and £59,130 annually per child.<sup>21</sup> These costs fall to a variety of agencies (e.g. education, social services and youth justice) and also include the direct costs to the family of the child's illness.
- There are clinically proven and cost-effective interventions. Taking conduct disorder as an example, potential life-long savings from each case prevented through early intervention have been estimated at £150,000 for severe conduct problems and £75,000 for moderate conduct problems.<sup>22</sup>

## Overview

### Mental health problems in children and young people are common and account for a significant proportion of the burden of ill health in this age range.

The World Health Organization (WHO) defines mental health as not simply the absence of disorder but 'a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'.<sup>1</sup> This broader definition is particularly appropriate in childhood and adolescence, as mental health is the foundation of healthy development and mental health problems at this life stage can have adverse and long-lasting effects. In this chapter we will focus mainly on mental disorders, the most severe end of the spectrum of problems. The use of the term 'mental disorder' should not be taken as an indication that the problem is entirely within the child as mental disorders can develop for a variety of reasons including a reaction to or interaction with external circumstances.

### Rates and profile of mental health problems among children and young people

The most recent British surveys carried out by the Office for National Statistics of children and young people aged 5–15 years in 1999 and 2004<sup>2,3</sup> (referred to as the British Child and Adolescent Mental Health Surveys or B-CAMHS) found that **10% had a clinically diagnosable mental disorder** (i.e. a mental health problem associated with significant impairment). Among the 5 to 10 year olds, 10% of boys and 5% of girls had a mental disorder while among the 11 to 16 year olds the prevalence was 13% for boys and 10% for girls. In these two surveys the prevalence of anxiety disorders was 2–3%, depression 0.9%, conduct disorder 4.5–5%, hyperkinetic disorder (severe ADHD) 1.5% and autism spectrum disorders 0.9%. Rarer disorders including selective mutism, eating disorders and tics disorders occurred in 0.4% of children. Conduct disorders, hyperkinetic disorder and autism spectrum disorders were more common in boys, and emotional disorders were more common in girls.

Young people aged 16 and over are included in the Office for National Statistics surveys of adult psychiatric morbidity. As these surveys used different assessment methods and categories to the surveys of under-16s, direct comparison is more difficult. In the 2007 survey of adults in England,<sup>4</sup> **in the 16–24-year-old age group 2.2% experienced a depressive episode, 4.7% screened positive for post-traumatic stress disorder, 16.4% experienced anxiety disorder, 0.2% had a psychotic illness and 1.9% had a diagnosable personality disorder.**

**Self-harm among young people is a major concern.** In the 2004 B-CAMHS survey,<sup>3</sup> the rate of self-harm in 5–10 year olds was 0.8% in those with no disorder, rising to 6.2% in those with an anxiety disorder and 7.5% among the group of children with hyperkinetic disorder, conduct disorder

or one of the less common disorders. **The prevalence increased dramatically in adolescence with rates of 1.2% in those with no disorder, rising to 9.4% in those with an anxiety disorder and 18.8% in those with depression.** In a 2007 survey of young adults,<sup>4</sup> 6.2% of 16–24 year olds had attempted suicide and 8.9% had self-harmed in their lifetime. Suicide is the leading cause of death in young people. The suicide rate among 10–19 year olds is 2.20 per 100,000; it is higher in males (3.14 compared with 1.30 for females) and in older adolescents (4.04 among 15–19 year olds compared with 0.34 among 10–14 year olds).<sup>5</sup> Recent research has shown a significant fall in the rates among young men in the period 2001–2010.

Despite the increasing recognition of the importance of the early years as a focus for early intervention, there has been less research on the profile and rates of problems in the under-5s and they were not included in the B-CAMHS surveys. One study showed that the prevalence of problems for 3-year-old children was 10%, with 66% of parents sampled having one or more concerns about their child.<sup>6</sup> A further study showed that 7% of children aged 3–4 years exhibited serious behaviour problems.<sup>7</sup> Differentiating normal from abnormal behaviour in younger children can be difficult and a substantial proportion of children will 'grow out of' early childhood problems, particularly among the under-3s. However, longitudinal studies suggest that 50–60% of children showing high levels of disruptive behaviour at 3–4 years will continue to show these problems at school age.<sup>8</sup> Moreover, neurodevelopmental problems including language delay, ADHD and autism spectrum disorders are first manifest in the pre-school years.

### Are mental health problems among children and young people becoming more common?

There is a popular perception that children and young people today are more troubled and badly behaved than previous generations. Research looking over a 25-year period from 1974 to 1999 found increases in conduct problems in young people, affecting males and females, all social classes and all family types.<sup>9</sup> There is also evidence for a rise in emotional problems, but mixed evidence in relation to rates of hyperactivity. There were no differences in rates between the 1999 and 2004 B-CAMHS surveys.

However, evidence for a recent rise in levels of psychological distress is provided by data from the West of Scotland Twenty-07 study<sup>10</sup> in which marked increases in GHQ 12 'caseness' (a scoring system for mental health) were found in females between 1987 and 1999 and among both males and females between 1999 and 2006. In addition, **self-harm rates have increased sharply over the past decade, as evidenced by rates of hospital admission<sup>11</sup> and calls to helplines,<sup>12</sup>** providing further indications of a possible rise in mental health problems among young people. However, in the absence of up to date epidemiological data, it is uncertain whether there has been a rise in the rates of mental health problems and whether the profile of problems has changed.

## The impact of mental health problems

Mental health problems not only cause distress but can also be associated with significant problems in other aspects of life and affect life chances. In the B-CAMHS surveys cited earlier<sup>2,3</sup> all forms of mental disorder were associated with an increased risk of disruption to education and school absence. Research on the longer-term consequences of mental health problems in childhood and adolescence have found associations with poorer educational attainment<sup>13,14</sup> and poorer employment prospects,<sup>13,14</sup> including the probability of 'not being in education, employment or training' (NEET).<sup>13,14</sup> The mechanisms by which mental health problems in childhood and adolescence affect educational attainment and life chances are complex, but it is likely that at least some of the risk is attributable to the direct effects of the disorder itself.<sup>13</sup> Social relationships can be affected both in childhood and adolescence and in adult life.<sup>13</sup> Other increased risks include drug and alcohol use, particularly for young people with conduct disorder, ADHD and emotional disorder.<sup>13</sup> Conduct disorder and ADHD are also both associated with an increased risk of offending<sup>13</sup> and conduct disorder in girls is associated with an increased risk of teenage pregnancy.<sup>13</sup>

The risks are not confined to psychosocial problems. There are also associations between mental health problems in childhood and adolescence and poorer physical health as well as the possibility of developing at-risk health behaviours. In the B-CAMHS surveys,<sup>2,3</sup> parents of children and young people with mental health problems were more likely to report that their child's general health was poor. There are particular risks associated with some mental health problems, for example psychosis, which is associated with premature mortality in adult life,<sup>15</sup> and anorexia nervosa,<sup>16</sup> which can be life-threatening and lead to longer-term health problems. Adversity in childhood – including abuse and neglect, parental mental illness, parental drug and alcohol abuse, and domestic violence – has been shown to be associated with an increased risk of the major morbidities of mid-life, including heart disease and some cancers.<sup>17,18</sup> It is thought that the development of mental health problems and at-risk health behaviours act as mediating factors in the link between early adversity and later-life problems. For example, it is known that young people with histories of conduct problems, depression and suicidality are 4–6 times more likely to smoke<sup>13</sup> and 2–4 times more likely to use alcohol regularly.

**Mental health problems in children and young people are often persistent;** this is particularly true for conduct disorder, hyperkinetic disorder and autism spectrum disorders.<sup>19</sup> Although emotional disorders have a better prognosis, they are not always benign, and again may persist.<sup>19</sup> The persistence of child and adolescent-onset disorders into adult life is of particular concern. **The Dunedin study,<sup>20</sup> which followed up a large cohort of children through to adulthood, found that half of the adults in the study who had a psychiatric disorder at age 26 had first had problems prior to age 15, and three-quarters had problems before age 18;** these rates were even higher among adults in contact with mental health services.

As well as the impact on the individual child and family, mental health problems in children and young people also result in an increased cost to the public purse. **Mental health problems during childhood and adolescence in the UK result in increased costs of between £11,030 and £59,130 annually per child.**<sup>21</sup> Taking conduct disorder as an example, lifetime costs of a one-year cohort of children with conduct disorder (6% of the child population) have been estimated at £5.2 billion, with each affected individual being associated with costs around 10 times that of children without the disorder.<sup>22</sup> Costs falling on the public sector are distributed across many agencies. The cost of crime attributable to adults who had conduct problems in childhood is estimated at £60 billion a year in England and Wales, of which £22.5 billion a year is attributable to conduct disorder and £37.5 billion a year to sub-threshold conduct disorder.<sup>23</sup>

## Risk factors and associations

Research from around the world has found that **the risk of developing a mental health problem is strongly increased by social disadvantage and adversity.**

In the 2004 B-CAMHS survey,<sup>3</sup> the prevalence of mental disorder was higher in children and young people:

- in lone-parent (16%) compared with two-parent families (8%)
- in reconstituted families (14%) compared with families containing no stepchildren (9%)
- whose interviewed parent had no educational qualifications (17%) compared with those who had a degree-level qualification (4%)
- in families with neither parent working (20%) compared with those in which both parents worked (8%)
- in families with a gross weekly household income of less than £100 (16%) compared with those with an income of £600 or more (5%)
- in families where the household reference person was in a routine occupational group (15%) compared with those with a reference person in the higher professional group (4%)
- living in areas classed as 'hard pressed' (15%) compared with areas classed as 'wealthy achievers' or 'urban prosperity' (6% and 7% respectively).

Parental mental illness is known to be associated with a higher rate of mental health problems in children and young people,<sup>24,25</sup> as are parental substance misuse<sup>26</sup> and parental criminality.<sup>27,28</sup> Violence between parents also increases the risk of children and young people developing mental health problems, as well as increasing the risk that the children may experience abuse and neglect.<sup>29,30</sup>

Children and young people who have experienced severe adversity such as abuse and neglect are at particularly high risk of developing a mental health problem, as are looked-after children and young people in contact with the criminal

justice system (see Chapters 11 and 12 of this report). Severe bullying and experiences of discrimination can also act as risk factors for the development of mental health problems.

Physical illness, disability and developmental co-morbidities also act as risk factors for mental health problems. Living with long-term physical illness or disability raises the risk of developing a mental health problem. Young people living with a long-term physical illness are twice as likely to suffer from emotional or conduct disorders.<sup>31</sup> Children and young people with learning disabilities and children and young people with ASD are at greatly increased risk of developing a co-morbid mental health problem.

Research has shown that being among the youngest in the school year is associated with educational disadvantage and in the 1999 B-CAMHS survey being among the youngest in the school year group was found to be associated with a slightly greater risk of mental disorder.<sup>58</sup>

## Ethnicity and mental health

The 1999 and 2004 B-CAMHS surveys<sup>2,3</sup> found differences in the rates of mental disorder across different ethnic groups. However, as there were only a small number of ethnic minority children and young people in the studies and the information gathered from non-English speaking informants was more limited than that obtained from English speaking informants, interpreting the results was difficult. With this caveat in mind, in the 2004 B-CAMHS survey the rates of disorder were found to vary by ethnic group – children and young people categorised as Indian had a rate of approximately 3%; children and young people in the Pakistani/Bangladeshi group a rate of just under 8%; children and young people in the black group a rate of around 9%; with the highest rate in the white group at approximately 10%. The low rate of problems in young people of Indian heritage has been replicated in a more recent study.<sup>59</sup>

To date, there has been relatively little research on the relationship between ethnicity and child mental health.<sup>60</sup> The most recent census of England and Wales in 2011 found an increase in ethnic diversity. There is a need for better research evidence on the prevalence of child mental health problems in minority ethnic groups as well as looking at service utilisation and whether particular groups experience barriers to receiving a service, in addition to understanding why some groups and communities may be more resilient.

## Strategies for intervention and prevention

Risk factors for developing a mental health problem can operate at a societal level, at a community level and at the level of the individual and their family. Similarly, strategies to improve the mental health of children and young people can be employed at multiple levels. In this chapter we concentrate primarily on interventions targeted at the individual child or young person and their family. This is not to deny the importance of developing strategies to tackle the social determinants of poor health. Government policy and actions should effectively address inequalities to

promote population mental health as well as prevent mental ill health and promote recovery when problems develop.<sup>32</sup> In focusing primarily on what might be thought of as ‘clinical interventions’, we are not intending to overlook the important role that school and community play in the lives of children and young people and the potential for intervention through these domains.<sup>33</sup>

The past two decades have seen major developments in research evaluating the effectiveness of treatments for the mental health problems of childhood and adolescence<sup>34,35</sup> as well as an increasing interest in strategies for prevention.

### Case study

#### PreVenture – school-based programme to reduce teenage substance misuse in London

PreVenture is a school-based drug and alcohol prevention programme that helps teenagers to learn coping skills in order to better manage personality traits associated with risk for addiction. The programme uses psycho-educational manuals within interactive group sessions with students aged 13–16 years. The group sessions focus on motivational factors for risky behaviours and provide students with coping skills to aid their decision making in situations involving anxiety and depression, thrill seeking, aggressive and risky behaviour (e.g. theft, vandalism and bullying), drugs and alcohol misuse. Students identified as being at elevated risk of engaging in risky behaviours are given a two-session intervention workshop and followed up every 6 months for 2 years. School-based facilitators included teachers, school counsellors and pastoral staff.

Studies to evaluate the effectiveness of the programme in more than 20 London schools (located in densely populated, low-income areas of London as well as suburban areas) demonstrated that brief school-based targeted interventions can prolong survival as a non-drug user over a 2-year period. The success of this programme is likely to be due to its selective nature in that only high-risk youth with known personality risk factors for early-onset substance use were targeted. This selective approach allowed delivery of interventions that were brief and personally relevant, and focused on risk factors directly related to the individual’s risk for substance use.

These studies are the first to demonstrate that teacher-delivered and personality-targeted brief coping skills interventions can reduce substance use over a 2-year period, not only in those being treated but also spreading to the rest of the school. Although designed to prevent substance misuse, analyses have shown that the interventions concurrently reduce or prevent common emotional and behavioural problems in adolescents.<sup>61,62,63,64</sup>

*‘I have learned that I don’t have to go with whatever I first think of and that I should try to do more stuff to help me with what I want to do when I am older.’*

## Effective 0 to 5 early years intervention programmes and outcomes

As outlined in the chapter on preconception and pregnancy (see Chapter 5), there is particular interest in this period of the life span as a focus for prevention.

The Evidence2Success project<sup>36</sup> for the National Institute for Health and Care Excellence (NICE) Public Health Intervention Advisory Committee on the social and emotional wellbeing of vulnerable children aged 0–5 years looked at programmes that target one or more key developmental outcomes in infancy (0–2 years) and early childhood (3–5 years), aiming to achieve positive relationships (reduce risk of maltreatment) and behaviour (increase in pro-social behaviour), emotional wellbeing (self-regulation and free from depression and anxiety) and educational skills and attainment, particularly readiness for school.

**Of the 100 programmes identified, 25 yielded relevant positive outcomes and 11 of these were found to be based on strong, reliable evidence.** The benefit-to-cost ratio was based on the calculations provided by the Washington State Institute for Public Policy.<sup>37</sup> These programmes are currently implemented in the UK primarily through children's centres, Child and Adolescent Mental Health Services (CAMHS) or other specialist units. They fall into the following five categories:

- **pre-school curricula to enhance children's readiness for school**, in particular skills in language and literacy (e.g. Early Literacy and Learning Model with a benefit-to-cost ratio\* of \$3.60)
- **parenting group programmes to improve children's behaviour** (e.g. Incredible Years BASIC with a benefit-to-cost ratio of \$4.20)
- **parent and child therapy programmes to improve children's relationships with their parents/carers** (e.g. parent-child interaction therapy with a benefit-to-cost ratio of \$7.37)
- **home-visiting programmes to improve children's relationships with their parents/carers** (e.g. Nurse-Family Partnership with a benefit-to-cost ratio of \$3.23)
- **intensive child and family support programmes to improve behaviour and children's relationships with their parents/carers** (e.g. multidimensional treatment foster care with a benefit-to-cost ratio of \$5.20).

There are several additional programmes without adequate cost-effectiveness studies but with **strong evidence of efficacy**. These include:

- the **detection and treatment of postnatal depression** (e.g. group cognitive behavioural therapy and individual counselling for depression of perinatally identified cases)<sup>38</sup>
- **improving relationship quality in the first year of life** (e.g. video feedback interactive programmes)<sup>39–41</sup>

\* Benefit-to-cost ratios are calculated from the ratio of the monetary gain that follows from an intervention against the costs of setting up and providing the intervention.

- **specific child maltreatment prevention programmes** based on family therapy and social learning principles which achieve increased maternal educational attainment and parent involvement in school as well as decreased family problems.<sup>42</sup>

## Treatments for mental health problems of childhood and adolescence

The upsurge of research evaluating the effectiveness of treatments for mental health problems of childhood and adolescence has allowed the potential to introduce evidence-based practice (EBP) in CAMHS across the country.<sup>43</sup>

EBP in mental health, as in other medical specialties, involves three components:

- taking account of the best available research into the intervention
- patient preference
- the individual patient's context (which in mental health is complex and includes the family system, school, any co-occurring physical illness, any safeguarding concerns, history of abuse or neglect, and any history of substance misuse or involvement with the criminal justice system).

Although the intervention offered is important, the therapeutic alliance between the clinician and the child/young person and family is also a potent determinant of outcomes in mental health.<sup>44</sup> **There is evidence that EBP is statistically superior to usual care.**<sup>45</sup> Experimental work also demonstrates that the major benefit from EBP to child mental health services is in **value**, conceived of as the ratio of the outcome that matters to patients to the cost of delivering that outcome.<sup>46</sup> **Using EBP has been shown to reduce costs by up to 35%<sup>47</sup> and duration of treatment by up to 43%.<sup>48</sup>**

Intervening early in the course of disorder can reduce the risk of later disorder and has the potential to generate savings for services and society. For example, **recent neurobiological research has shown that depression leaves its mark on the developing brain, and undiagnosed or untreated depression in young people creates a more treatment-resistant form of the illness.**<sup>49</sup> The case for prevention is even clearer for conduct disorder. Potential savings (including intangibles) from each case prevented through early intervention have been estimated at £150,000 for severe conduct problems and £75,000 for moderate conduct problems.<sup>22</sup>

Below we provide a broad-brush summary of the literature on evidence-based treatments for two of the most common mental health problems as illustrative examples.

## Evidence-based treatments for conduct disorders

**Psychosocial therapies are the mainstay of treatment for conduct disorders** and are both clinically and cost-effective. Up to the age of 11, conduct disorders are best

treated through modification of parenting practices. There are numerous programmes with dozens of studies. **Parent training delivered in group formats is highly cost-effective.** In more severe cases of conduct disorder, parent-child interaction therapy, which helps parents to modify their behaviour with their child in real time, appears to be quite efficacious. The key factor is improving positive parenting. The maintenance of these gains is less clear and the programmes make substantial demands on families, creating a significant problem in relation to dropout, particularly among high-risk groups. Social and cognitive problem-solving interventions with the child may be helpful in increasing self-control and maintaining gains.

In young people aged 12 and older, interventions tend to be less effective. However, with this group even small effect sizes can imply relatively large social and economic benefits. Paradoxically, the highest-risk adolescents show greatest improvement. In this context perhaps more than any other, rigorous adherence to treatment protocols appears to be particularly important. **All effective treatments for conduct disorder involve the family.** Multisystemic therapy, brief strategic family therapy and functional family therapy appear effective for moderate-to-severe cases. Multidimensional treatment foster care is an approach practised in the USA and now being trialled in the UK for the most severely affected young people who are already in care. Cognitive behavioural therapy, although most commonly practised, has a limited evidence base. Social and problem-solving skills training, also commonly used, lacks evidence of generalisation of improvements. Anger management, frequently used with some optimism, has had some positive trials but its value across contexts is questionable. In the USA, medication is increasingly used in the treatment of conduct disorder and, in particular, risperidone is used in the management of aggression. NICE has recently included this in the guideline on treatment for conduct disorder for use in the management of explosive aggression as a short-term (up to 6 weeks) adjunct in combination with other approaches.<sup>50</sup>

## Evidence-based treatments for depression

There are effective treatments for depression in children and young people.<sup>34</sup> Cognitive behavioural therapy for depression has been shown to be effective in both individual and group settings, but is most likely to be helpful in the acute phase of the disorder and in individuals who are motivated. Using cognitive behavioural therapy principles in general case management (e.g. careful monitoring of problems and lifestyle, providing practical suggestions about sleep, hygiene and diet) appears to achieve good results. Interpersonal psychotherapy and family therapy are also effective, and attachment-based family therapy has been shown to be helpful for quite severe suicidal ideation.

Medication in the form of selective serotonin reuptake inhibitors (SSRIs), especially fluoxetine, is effective in the treatment of depression, and maintenance doses may be able to reduce the likelihood of recurrence. However, controversy surrounds their use because some SSRIs appear

to increase the risk of suicide in this population. Therefore, NICE recommends that they should be administered with care by child and adolescent psychiatrists<sup>51</sup> and reserved for moderate-to-severe depression. There is evidence supporting the use of adjunctive psychosocial treatments, which may speed up response to treatment and decrease suicidality.

## State of services

**Despite the existence of an evidence base,** now formalised by NICE in a suite of guidelines that are relevant to children and young people's mental health, **there are problems in access to evidence-based treatments.**

The final report of the National CAMHS Review in 2008<sup>52</sup> found that, although there had been considerable investment in services since 2004, there was variation in access to services and in implementation of evidence-based interventions. **More recently, however, there has been disinvestment in CAMHS, particularly in local authority expenditure.**<sup>53</sup> There are also frequent anecdotal reports of services having long waiting lists and of thresholds being too high in terms of referrals of children and young people with less severe problems not being accepted. The multi-agency nature of services and complex commissioning arrangements allow the potential for a lack of co-ordination or integration between agencies which, particularly at a time of shrinking budgets, may mean that children and young people fall through the net. **There may also be reluctance for agencies to invest in interventions when they themselves may not benefit from any savings accrued, for example by providing early intervention.**

There is room for some optimism in that there has been some investment in the Children and Young People's Improving Access to Psychological Therapies (CYP IAPT) programme,<sup>54</sup> which is attempting to address some of the shortfalls in access to evidence-based treatments, particularly in relation to cognitive behavioural therapy and parenting programmes, and which by the end of year 3, in 2015, should reach 60% geographical coverage. However, as noted, this is against a backdrop of austerity.

## Case study

### Specialist day service for young people with complex mental health needs – Greater Manchester West Mental Health NHS Foundation Trust

This nurse-led service provides a variety of treatment options and consultation to colleagues in 'specialist' CAMHS teams, young people aged 14–18 and their families/carers. Operating for almost 3 years, the service offers an alternative to specialist inpatient admission and supports early transition from hospital to home, ensuring that young people are treated in the least restrictive environment.

Other members are co-opted into the project as required to provide, for example, sessional input from a dietician and art therapist. It provides a day service for six young people and an extensive outpatient and outreach facility, and conducts individual, group and multi-family group sessions depending on client need.

Most of the young people present with enduring mental health problems such as psychosis, eating disordered behaviour and self-harm. In some instances, inpatient admission can be counter-therapeutic and using day and outpatient provision can reduce issues of dependency and contagion.

## What is an acceptable child and adolescent mental health service?

An adequate service must be able to offer comprehensive assessment by clinicians who are skilled in engaging children and young people and who have a good understanding of how mental health problems manifest at different developmental stages and ages. Intervention should be based on careful formulation of evidence and practice and be collaborative between families and practitioners, and the effects should be systematically monitored using appropriate outcomes measures, with intervention being modified on the basis of the outcomes. Services should be able to report treatment outcome in at least 50% of cases on the basis of a standardised patient or carer-rated measure.<sup>55</sup>

The service must be able to offer a range of evidence-based treatments for the most common child and adolescent mental health problems including:

- treatment for ADHD including medication and psychosocial treatments
- interventions for suicidality and self-harm
- cognitive behavioural therapy and other evidence-based treatments for anxiety (including obsessive compulsive disorder and social phobia) by clinicians trained to at least CYP IAPT practitioner criteria
- parent training groups for oppositional and conduct disorders

- family therapy including evidence-based approaches for conduct problems
- cognitive behavioural therapy and interpersonal therapy for depression and medication where appropriate.

Services should also have arrangements in place to ensure provision of specialist interventions/services for less common problems where there may not be a sufficient critical mass of patients presenting to an individual team to warrant provision. The 'commissioning footprint' in terms of population mass required to support such interventions/services may be larger than that of a single clinical commissioning group (CCG) and require collaboration across CCGs and, in some cases, local authorities. Examples of such interventions/services include psychodynamic psychotherapy; specialist eating disorder teams who are able to offer a range of interventions including eating disorder-focused family therapy for anorexia nervosa; dialectical behaviour therapy or other evidence-based treatment for young people who repeatedly self-harm; and treatments for young people with psychoses. As self-harm and anorexia are both common reasons for admission to hospital, the provision of such services also has the potential to reduce the need for hospital admission as well as improving outcomes. In addition, there should be access to what are sometimes called crisis/home-treatment services providing intervention aimed at reducing the need for hospital admission.

Services must take active steps to increase access, including multiple access points, telephone advice and psycho-education, and carry out ethnic monitoring to show accessibility to diverse communities. Services should offer web-based interventions for parents to ensure immediate help, adequate signposting and low-intensity evidence-based interventions. School-based services should be available, but these also must be evidence based. They must, in addition, be alert to the possibility of these children and young people being stigmatised and must take steps to protect them from this.

There should be joint agency protocols across health (including adult mental health services), education and social care in relation to joint working, referrals between agencies and the management of risk, including safeguarding concerns. Where possible, interventions for adults in the family and those for the child should be integrated, as families with complex needs have the poorest outcomes. Parents contribute to the delivery of therapy for their child, but deserve to have their own needs attended to in turn. Above all, all those attending CAMHS have a right to feel listened to and appropriately responded to, not solely according to the diagnosis but in terms of their personal need.

## Conclusion

Mental health problems in children and young people are common, can be long-lasting and affect life chances as well as being costly for the individual and society. In order to improve the mental health of England's children and young people, action is needed on multiple levels – from societal to the level of the individual – both to build resilience and to

effectively intervene when problems develop. Fortunately, there are effective measures and interventions. **The challenge is ensuring implementation.**

## What we still need to find out

Since the start of the 21st century there has been a considerable increase in the quantity and quality of outcomes research in child and adolescent mental health, but despite this there remain many areas where research knowledge is insufficient to guide practice. Future efforts in research and practice will need to address the following issues if we are to meet the ideal of reaching and treating all children and young people with mental health problems:

- For some mental health disorders of children and young people there is still a lack of clarity about diagnostic criteria. This makes it difficult to conduct research and to interpret it in order to determine which treatments have the best evidence for effectiveness and cost-effectiveness, which ultimately has implications for services 'in the field'.
- It is known that modifying the child's family environment can yield substantial positive outcomes, and behavioural genetic studies have shown that social and environmental influences play a key role in triggering genetic vulnerabilities (increasing the likelihood of disorder developing) or, conversely, protecting against genetic predispositions. Future research will need to make sophisticated assessments of environmental influence to help us to better understand how the social environment may counteract genetic risk – which may lead to the development of better preventive and therapeutic interventions – and whether vulnerability to environmental influence can indicate whether a given psychosocial intervention may be suitable or unsuitable for a given child.
- Too many studies on which our current evidence base rests have significant methodological flaws, such as small sample sizes, failures of replication, or differences in outcome between research and clinical settings. This means that it is often difficult or impossible to generalise findings from research into everyday practice. These problems need to be tackled if we are to truly understand which interventions are most effective for the mental health problems of children and young people.
- We also need to carry out studies with longer follow-up periods, to help us to assess, for example, how long pharmacological treatments for ADHD or depression should be continued once remission has been achieved, or the relative benefits of short-term and extended psychological interventions.
- As mentioned above, we need to collect data on both what services are offered to children in mental health services and what the outcomes of these interventions are. We are currently lacking a way of integrating information nationally as well as locally across services. For example, we have no way of relating the outcomes of health service interventions to educational or often even social service interventions, yet where children present with mental health problems is more likely to be the consequence of circumstance rather than the characteristics of their presenting problem.
- At present, many children and young people do not respond adequately to even the best-evidenced treatments. We need to find out more about sub-groups who do not respond to treatment, and to explore whether better results could be achieved by alternative means – in terms of both different treatments and different settings in which treatment is provided (as outlined below). This could help us to develop care pathways for children and adolescents who present with different mental health problems, starting with simpler interventions and moving on to more complex interventions (or combinations of interventions) if the initial ones do not achieve a good outcome.
- At present, some interventions are being offered that have not been adequately evaluated (for example, systemic therapies). We need to evaluate these treatments more fully and to identify the effective elements that they contain, as it is possible that they may help the 'poor responders' to existing evidence-based treatments.
- We also need more information (from both research and practice) about the adverse outcomes of treatments. In the case of pharmacological treatments, it is already accepted that such adverse effects must be monitored and reported, and these reports help to guide marketing authorisations and prescribing decisions. The possibility of adverse outcomes from psychological therapies needs to be investigated and reported with the same diligence.
- We need to understand more about alternative settings in which treatments may be implemented, especially for those children and young people who are not currently reached by existing services. This should include not just physical locations such as schools and community centres, but also social contexts, for example involving community leaders, peers and near-peers (that is, young people who are slightly older than the young service users).
- As unmet need is so high, we need to develop innovative methods of service delivery (e.g. the internet, the media and improving mental health literacy in the wider community) in the contexts of prevention and intervention.

## Key messages for policy

- Improving the mental health outcomes of England's children and young people requires action at multiple levels from the societal to the individual.
- The B-CAMHS surveys should be repeated to provide more up-to-date information in order to aid planning of healthcare services. In view of the recognition of the importance of the early years as a focus for intervention, the survey should be extended to the under-5s. The new survey should also address the need for better evidence on the mental health of children and young people from ethnic minorities.
- The investment in and focus on children and young people's mental health should be proportionate to the associated health burden.
- Government policy and actions should effectively address inequalities to promote population mental health, prevent mental ill health and promote recovery.
- Policy to support parents as well as strengthening parenting skills has the potential to yield benefits in relation to physical and mental health. Measures can range from indirect (e.g. alleviating aspects of family adversity which may negatively affect parenting) to direct (e.g. delivery of parenting interventions).
- Services should ensure that where parents have a mental illness both services and interventions are available which take account of their needs and role as a parent.
- Service design should recognise the role and importance of schools in relation to children and young people's health in terms of both the potential of schools to foster the development of resilience and providing opportunities for the delivery of interventions aimed at improving mental health.
- Healthcare needs to support developing better mental health informatics to support evidence-based commissioning by understanding patterns of prevalence and need as well as aiding the monitoring of outcomes.
- Healthcare systems need to ensure integration across all parts of the system so that the mental health needs of children and young people can be met in the most effective and efficient way and that children and young people do not fall through the net.
- Healthcare professionals need to ensure implementation of evidence-based and outcome-based approaches to intervention is encouraged in all parts of the system.
- Efforts need to be made to support the delivery of effective CAMHS by addressing workforce and training issues and shortfalls in resources.

## References

1. WHO: Mental health: a state of wellbeing. Geneva: World Health Organization; 2011. [www.who.int/features/factfiles/mental\\_health/en/](http://www.who.int/features/factfiles/mental_health/en/)
2. Office for National Statistics: The mental health of children and adolescents in Great Britain. London: Office for National Statistics, 1999.
3. Green H, McGinnity A, Meltzer H, Ford T, Goodman R: Mental health of children and young people in Great Britain, 2004. A survey carried out by the Office for National Statistics on behalf of the Department of Health and the Scottish Executive. Basingstoke: Palgrave Macmillan, 2005.
4. McManus S, Meltzer S, Brugha T, Bebbington P, Jenkins R. Adult psychiatric morbidity in England, 2007. Results of a household survey. Leeds: The Health & Social Care Information Centre, 2009.
5. Windfuhr K, While D, Hunt I, Shaw J, Appleby L, Kapur N: Suicides and accidental deaths in children and adolescents. *Arch Dis Child* 2013. doi: 10.1136/archdischild-2012-302539 [epub ahead of print]
6. Stallard P: The behaviour of 3-year-old children: Prevalence and parental perception of problem behaviour: a research note. *J Child Psychol Psychiatry* 1993, 34: 413-421.
7. Charlton T, Abrahams M, Jones K: Prevalence rates of emotional and behavioural disorder among nursery class children in St Helena, South Atlantic: An epidemiological study. *J Soc Behav Personality* 1995, 10: 273-280.
8. Campbell SB: Behavior problems in preschool children: a review of recent research. *J Child Psychol Psychiatry* 1995, 36: 113-149.
9. Collishaw S, Maughan B, Goodman R, Pickles A: Time trends in adolescent mental health. *J Child Psychology and Psychiatry* 2004, 45(8):1350-1362.
10. MRC Social and Public Health Sciences Unit: West of Scotland Twenty-07 Study. Health in the Community. <http://2007study.sphsu.mrc.ac.uk/>
11. Response to Jo Swinson MP Parliamentary Question. [www.publications.parliament.uk/pa/cm201011/cmhansrd/cm111128/text/111128w0005.htm#1111297001597](http://www.publications.parliament.uk/pa/cm201011/cmhansrd/cm111128/text/111128w0005.htm#1111297001597)
12. ChildLine: Saying the unsayable: What's affecting children in 2012. [www.nspcc.org.uk/news-and-views/our-news/child-protection-news/12-12-04-childline-report/saying-the-unsayable-pdf\\_wdf93130.pdf](http://www.nspcc.org.uk/news-and-views/our-news/child-protection-news/12-12-04-childline-report/saying-the-unsayable-pdf_wdf93130.pdf)
13. Sainsbury Centre for Mental Health: Childhood mental health and life chances in post-war Britain: Insights from three national birth cohort studies. [www.centreformentalhealth.org.uk/pdfs/life\\_chances\\_summary.pdf](http://www.centreformentalhealth.org.uk/pdfs/life_chances_summary.pdf)
14. Goodman A, Joyce R, Smith JP: The long shadow cast by childhood physical and mental health problems on adult life. *Proc Natl Acad Sci* 2011, 108(15): 6032-6037.
15. Royal College of Psychiatrists: Primary Care Guidance: Early intervention in psychosis – keeping the body in mind. [www.rcpsych.ac.uk/pdf/physical\\_health\\_guidance.pdf](http://www.rcpsych.ac.uk/pdf/physical_health_guidance.pdf)
16. National Institute for Clinical Excellence: Eating disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa and related eating disorders. CG9. London: British Psychological Society/Gaskell, 2004.
17. Edwards, V, Holden GW, Felitti VJ, Anda RF: Relationship between multiple forms of child maltreatment and adult mental health in community respondents: Results from the Adverse Childhood Experiences Study. *American Journal of Psychiatry* 2003, 160(8):1453-1460.
18. Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss MP, Marks JS: Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) study. *Am J Prev Med* 1998, 14:245-258.
19. Goodman R, Ford T, Meltzer H: Mental health problems of children in the community: 18 month follow up. *BMJ* 2002, 324(7352): 1496-1497.
20. Dunedin Multidisciplinary Health & Development Research Unit. Welcome to the Dunedin Multidisciplinary Health and Development Research Unit (DMHDRU). <http://dunedinstudy.otago.ac.nz/>
21. Suhrcke M, Puillas D, Selai C: Economic aspects of mental health in children and adolescents. In *Social cohesion for mental wellbeing among adolescents*. Copenhagen: WHO Regional Office for Europe, 2008:43-64.
22. Friedli L, Parsonage M: Mental health promotion: building an economic case. Belfast: Northern Ireland Association for Mental Health, 2007.
23. Sainsbury Centre for Mental Health. The chance of a lifetime: Preventing early conduct problems and reducing crime. London: Sainsbury Centre for Mental Health, 2009.
24. Manning C, Gregoire A: Effects of parental mental illness on children. *Psychiatry* 2009, 8: 7-9.
25. Royal College of Psychiatrists: Parental mental illness: The problems for children. Information for parents, carers and anyone who works with young people. London: Royal College of Psychiatrists, 2012.
26. Mayes LC: Substance abuse and parenting. In: Bornstein MH (ed), *Handbook of parenting*. Volume 4. Hillsdale: Lawrence Erlbaum Associates, 1999.
27. Sabates R, Dex S: Multiple risk factors in young children's development. CLS working paper 2012/1. London: Centre for Longitudinal Studies, 2012.
28. Children's and Families' Services: SCIE Guide 22. Children of prisoners – maintaining family ties. [www.scie.org.uk/publications/guides/guide22/files/guide22.pdf](http://www.scie.org.uk/publications/guides/guide22/files/guide22.pdf)
29. Hall D, Lynch M: Violence begins at home: Domestic strife has lifelong effects on children. *BMJ* 1999, 316:1151.

30. Department of Health: Improving safety, reducing harm: Children, young people and domestic violence. A practical toolkit for front-line practitioners. London: Department of Health, 2010.
31. Parry-Langdon N: Three years on: Survey of the development and emotional wellbeing of children and young people. London: Office for National Statistics, 2008.
32. Royal College of Psychiatrists: No health without public mental health: The case for action. Position statement PS4/2010. London: Royal College of Psychiatrists, 2010.
33. Schmied V, Tully L: Effective strategies and interventions for adolescents in a child protection context. Literature review. Ashfield: NSW Department of Community Services, 2009.
34. Fonagy P, Cottrell D, Phillips J, Bevington D, Glaser DE, Allison E: What works for whom? A critical review of treatments for children and adolescents, 2nd edn. New York: Guilford Press; in press.
35. Weisz JR, Kazdin AE (eds.): Evidence based psychotherapies for children and adolescents, 2nd edn. New York: Guilford Press; 2010.
36. The Social Research Unit: Investing in children: Technical report. Dartington: The Social Research Unit, 2012.
37. Arruabarrena I, de Paul J: Early intervention programs for children and families: Theoretical and empirical bases supporting their social and economic efficiency. *Psychosoc Intervent* 2012, 21(2): 117-27.
38. O'Hara MW, McCabe JE. Postpartum depression: current status and future directions. *Ann Rev Clin Psychol* 2013; 9:379-407.
39. Bernard K, Dozier M, Bick J, Lewis-Morrarty E, Lindhiem O, Carlson E: Enhancing attachment organization among maltreated children: results of a randomized clinical trial. *Child Dev* 2012, 83:623-636.
40. Beijersbergen MD, Juffer F, Bakermans-Kranenburg MJ, van IJzendoorn MH: Remaining or becoming secure: parental sensitive support predicts attachment continuity from infancy to adolescence in a longitudinal adoption study. *Dev Psychol* 2012;48:1277-1282.
41. Sutton C, Murray L, Glover V: Support from the Start: effective programmes from birth to two years. *Journal of Children's Services* 2012;7:18-28.
42. Miller-Perrin CL, Perrin RD. Child maltreatment: An introduction. Thousand Oaks: Sage Publications, 2013.
43. Mountford J, Wolpert M, Pugh K, Fonagy P: Bringing a value-based approach to mental health care: CYP IAPT and value-based health care. Manuscript in preparation.
44. Ormhaug SM, Jensen TK, Wentzel-Larsen T, Shirk SR: The therapeutic alliance in treatment of traumatized youths: relation to outcome in a randomized clinical trial. *J Consult Clin Psychol* 2013. doi: 10.1037/a0033884 [epub ahead of print]
45. Weisz JR, Kuppens S, Eckshtain D, Ugueto AM, Hawley KM, Jensen-Doss A: Performance of evidence-based youth psychotherapies compared with usual clinical care: A multilevel meta-analysis. *JAMA Psychiatry* 2013:1-12.
46. Porter ME: What is value in health care? *N Engl J Med* 2010, 363(26):2477-2481.
47. Weisz JR, Southam-Gerow MA, Gordis EB, Connor-Smith JK, Chu BC, Langer DA, McLeod BD, Jensen-Doss A, Updegraff A, Weiss B: Cognitive-behavioral therapy versus usual clinical care for youth depression: an initial test of transportability to community clinics and clinicians. *J Consult Clin Psychol* 2009, 77(3):383-396.
48. Weisz JR, Chorpita BF, Palinkas LA, Schoenwald SK, Miranda J, Bearman SK, Daleiden EL, Ugueto AM, Ho A, Martin J et al: Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: a randomized effectiveness trial. *Arch Gen Psychiatry* 2012, 69(3):274-282.
49. Heim C, Binder EB: Current research trends in early life stress and depression: review of human studies on sensitive periods, gene-environment interactions, and epigenetics. *Exp Neurol* 2012, 233:102-111.
50. National Institute for Health and Clinical Excellence: Conduct disorders and antisocial behaviour in children and young people: Recognition, intervention and management. London, The British Psychological Society and The Royal College of Psychiatrists, 2013
51. National Institute for Health and Clinical Excellence: Depression in children and young people: Identification and management in primary, community and secondary care (CG28). London, UK: National Institute for Health and Clinical Excellence; 2005.
52. CAMHS Review. Children and young people in mind: The final report of the National CAMHS Review. Department for Children, Schools and Families/Department of Health, 2009.
53. YoungMinds. Local authorities and CAMHS budgets 2012/2013. [www.youngminds.org.uk/assets/0000/7313/CAMHS\\_2012.13\\_briefing\\_local\\_authorities.doc](http://www.youngminds.org.uk/assets/0000/7313/CAMHS_2012.13_briefing_local_authorities.doc)
54. IAPT Programme. Children and Young People's Project. [www.iapt.nhs.uk/cyp-iapt/](http://www.iapt.nhs.uk/cyp-iapt/)
55. IAPT Programme. Routine outcome monitoring as part of CYP IAPT. [www.iapt.nhs.uk/cyp-iapt/routine-outcome-monitoring-as-part-of-iapt/](http://www.iapt.nhs.uk/cyp-iapt/routine-outcome-monitoring-as-part-of-iapt/)
56. Office of the Deputy Prime Minister (2004) Mental health and social exclusion, Social Exclusion Unit Report, London, ODPM.
57. Goodman R, Gledhill J, Ford T (2003) Child psychiatric disorder and relative age within school year: cross sectional survey of large population sample. *BMJ* 327:472.
58. Dogra N, Sviryzdenka N, Dugard P, Singh SP, Vostanis P (2013) Characteristics and rates of mental health problems among Indian and White adolescents in two English cities. *British Journal of Psychiatry* 203:44-50.
59. Dogra N, Singh S, Sviryzdenka N (2012) Mental health problems in children and young people from minority

- ethnic groups: the need for targeted research. *British Journal of Psychiatry*. 200: 265-267.
60. [www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-authorities-in-england-and-wales/rpt-ethnicity.html](http://www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-authorities-in-england-and-wales/rpt-ethnicity.html)
61. [www.kcl.ac.uk/iop/depts/addictions/research/legacyprojects/PreVenture.aspx](http://www.kcl.ac.uk/iop/depts/addictions/research/legacyprojects/PreVenture.aspx)
62. Conrod PJ, O'Leary-Barrett M, Newton N, Topper L, Castellanos-Ryan N, Mackie C, Girard A. Effectiveness of a Selective, Personality-Targeted Prevention Program for Adolescent Alcohol Use and Misuse. *JAMA Psychiatry*, published online 23 January 2013.
63. Conrod PJ, Castellanos-Ryan N, Strang J. Brief, Personality-Targeted Coping Skills Interventions and Survival as a Non-Drug User Over a 2-Year Period During Adolescence. *ArchGen Psychiatry*, Vol 67 (No. 1), Jan 2010.