

# Drawing on the Evidence

*Advice for mental health professionals  
working with children and adolescents*

SECOND EDITION 2006

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# Foreword

This booklet has been developed by the Child and Adolescent Mental Health Services Evidence Based Practice Unit (EBPU) at University College London in collaboration with the Faculty for Children and Young People (CYP), Division of Clinical Psychology of The British Psychological Society (BPS) and the BPS Centre for Outcomes Research and Evaluation (CORE) and with support from the Care Services Improvement Partnership (CSIP).

Our aim is to inform practitioners working with children and adolescents of the most recent findings regarding outcome research in this area. It is a revised edition of a booklet first produced in 2002, which has been updated in the light of the most recent evidence.

As with the first edition, we have focused on summarising the strength of research findings about different forms of intervention, pointing to the many gaps that remain, and drawing out the implications for practice of what research does exist to-date. The aim remains to provide an accessible précis of the research base so that busy practitioners can have a ready reminder of key findings.

This booklet is not intended to be a comprehensive good practice guide, nor to offer advice based on practitioner consensus where the evidence is lacking. Those wanting good practice guidance are directed to the relevant NICE guidelines (see Appendix 3).

Since there was no new overarching systematic review available in 2006 comparable to the review used to inform the first edition in 2002 it was agreed to update this booklet by reviewing the new evidence to have emerged since 2002 from the following sources:

- a) evidence identified in NICE guidelines published since 2002
- b) relevant Cochrane Reviews
- c) evidence from major randomised control trials not covered in the original review.

We have not included an overview of the literature in relation to prevention and promotion approaches, but hope to include a consideration of the evidence in this area in future versions.

This booklet has been written with mental health practitioners in mind and assumes a level of familiarity with key terms and categories. We are well aware that there is much debate about the use of diagnostic categorisation, but have kept this way of presenting the information as this is the way it is conceived of in the research literature.

A key challenge in putting together such a document is how to do justice to the complexity and limitations of the current evidence base, whilst trying to convey the main findings as briefly as possible. We are interested in any feedback from readers to help inform the development of future updated versions.

We would like to thank all those who have contributed to this process, and in particular: Liz Allison and Jonathan Bureau for coordinating and organizing revised drafts, Jemma Simmons for summarizing relevant NICE guidance and Uttom Chowdhury, Sarah Fortune and David Trickey for their invaluable expertise in relation to the sections on "habit disorders", "self harm" and "PTSD" respectively.

**Miranda Wolpert, David Cottrell, Peter Fonagy, Peter Fuggle, Jeannette Phillips, Steve Pilling, Samuel Stein and Mary Target (September 2006)**

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# Introduction

## **Aims**

This booklet was produced with the aim of creating an easily accessible resource that busy practitioners can have readily available as an aid to their decision-making. The first edition produced in 2002 was positively received and there were requests for an updated version.

This booklet is not meant to be prescriptive. It is recognised that inferences from currently available research studies are by no means the only relevant source of information, and that broad indications from the literature may need at times to be tempered in the light of specific contexts and situations. Nevertheless, even where the practice implications of the research outlined in this booklet are considered to be impractical or inappropriate in a given context, the strong suggestion is that they make a sensible starting point for practitioner decision making.

The original booklet (2002) was based on a comprehensive review of the evidence commissioned by the National Health Service Executive, ***A Review of the Outcomes of all Treatments of Psychiatric Disorder in Childhood*** (July 2000, updated December 2001), undertaken by Peter Fonagy, Mary Target, David Cottrell, Jeanette Phillips and Zarrina Kurtz with the assistance of Arabella Kurtz, and subsequently published as ***What Works for Whom? A Critical Review of Treatments for Children and Adolescents (2003)*** by Peter

Fonagy, Mary Target, David Cottrell, Jeannette Phillips, Zarrina Kurtz. Appendix 1 summarises the original review process.

The 2006 version has updated this summary in the light of relevant NICE guidelines, relevant Cochrane reviews, and major randomised trials published since 2002.

## **Development of the advice**

For the first edition, for each presenting problem, all working group members read the relevant chapter in the original review. One member was set the task of extracting what they deemed to be the key statements from the research, in terms of psychosocial and physical treatment. Brief descriptions of the defining characteristics of the main types of interventions can be found in Appendix 2.

These statements were circulated to the whole group, and discussed until everyone felt that a fair representation of the evidence being reviewed had been developed. On the basis of these discussions, a further set of statements outlining the implications for practice were developed, which were also agreed by all members of the working group as being fair conclusions to draw from the available evidence.

Each statement from the evidence and each practice implication were rated according to the following standard criteria (Shekelle et al., 2000):

### **Categories of Evidence:**

- 1a** Evidence from meta-analysis of randomised controlled trials;
- 1b** Evidence from at least one randomised controlled trial;
- 2a** Evidence from at least one controlled study without randomisation;
- 2b** Evidence from at least one other type of quasi-experimental study;
- 3** Evidence from descriptive studies such as comparative studies, correlation studies and case-control studies;
- 4** Evidence from expert committee reports or opinions, or from clinical experience of a respected authority, or both.

### **Strength of Practice Implications:**

- A** Directly based on category 1 evidence;
- B** Directly based on category 2 evidence or extrapolated from category 1 evidence;
- C** Directly based on category 3 evidence or extrapolated from category 2 evidence;
- D** Directly based on category 4 evidence or extrapolated from category 3 evidence.

The weight of the evidence was indicated in brackets after each statement and practice implication. A summary of the weighting system used has been reprinted on the inside back cover for ease of reference. The full document was then sent to a group of senior clinicians and researchers in the field for review.

For the 2006 review, chapters already written

were revised by the authors, with each member taking on a chapter to review in the light of major evidence that had emerged subsequent to the previous publication (i.e. where there was new evidence identified in NICE guidance, relevant Cochrane review or evidence from major randomised control trial), and a draft was then discussed and agreed by all authors.

### ***Limitations to using the evidence base***

Evidence-based practice is the integration of individual practitioner expertise with the best available external evidence from systematic research in order to reach decisions about client care.

This does not mean the wholesale application of findings from randomised controlled trials to all individuals with similar problems in a 'one size fits all' policy. Practitioners' choice of approach is always a decision-making process guided by a range of factors including the characteristics of the referred child/young person, their family and social circumstances as well as the service context. Decisions need to be made in the light of assessment of the appropriateness of a particular approach within a given context, its acceptability, the likely costs, risks and benefits compared with other approaches.

The picture presented by many children young people and families seeking help from services is complex, and the answers to the child's and the

# Introduction *continued*

family's problems are sometimes not at all obvious. For example, very little is known about the appropriateness of most relatively well-evaluated treatments with minority cultural groups. Any attempt to 'prescribe' treatment on the basis of diagnosis or presenting problem alone is likely to be over-simplistic. The aim of this guidance is to therefore provide a starting point for practitioner decision-making, not an end point.

One complication for practitioners in child and adolescent mental health is that the research on effectiveness is conducted largely on groups of children defined by diagnostic classifications. The operational definitions in diagnostic systems, such as DSM-IV and ICD-10, allow clarity of communication between researchers concerning the nature of the problems treated. However, most children do not present to CAMH services with such neat diagnostic labels. Instead, families tend to present with complex predicaments which require clinical judgment when applying research findings to everyday practice. Moreover, the research is often carried out with tightly defined groups, or it is carried out with groups from cultural backgrounds which are seldom seen routinely within the NHS in the United Kingdom.

Another complication is caused by gaps in the evidence base. We have tried to distinguish, throughout the booklet, those instances where there is no evidence about a particular

intervention from those instances where there is evidence that a particular intervention is ineffective or harmful. The problem faced in many areas of clinical practice is the lack of any evidence base at all. The fact that some sections are longer than others reflects the extent of (or lack of) the evidence base, and does not necessarily relate to levels of clinical need or significance. It is worth noting in this regard that the large number of statements from the evidence about pharmacological interventions in some sections reflects the extensive research literature in this area and should not necessarily be seen as reflecting the importance of this form of intervention as against alternatives.

Developing evidence-based practice must therefore remain an interplay between professional experience and systematic research. David Sackett, one of the 'founders' of evidence-based practice, defines 'individual clinical expertise' as 'the proficiency and judgment that individual clinicians acquire through clinical experience and clinical practice'. He comments that this is reflected in 'the more thoughtful identification and compassionate use of individual patients' predicaments, rights and preferences in making clinical decisions about their care' (Sackett et al., 1996). However, balanced against this must be a recognition that much 'natural' clinical decision making is founded on natural biases in reasoning (Garb, 1997; Kahnemann et al., 1982). As Kazdin (2000) points out, 'unsystematic data and their informal

integration are often unreliable, invalid approaches to decision making', and this can only be counterbalanced by systematic evaluation of individual clinical practice alongside an awareness of the latest research findings.

When the evidence base is not used as the basis for at least considering intervention choices, it is more likely that seemingly plausible but ineffective and/or harmful interventions may be introduced or continued and that new interventions that have been shown to do more good than harm may never be introduced (Muir Gray, 2001).

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# Disturbances of Conduct

*Covers diagnostic categories: conduct disorder, delinquency, recidivism, oppositional defiant disorder.*

*(NB This summary does not include a consideration of school-based interventions and whole community projects.)*

## **Statements from the evidence**

### **Behaviour Therapies, Cognitive Behavioural Therapies (CBT) and Parent Training**

- ◆ In parent training, on average two thirds of children under 10 years whose parents participate, show improvement. **(1a)**
- ◆ The effects of parent training programmes are detectable in long-term follow-ups of up to four years. **(1a)**
- ◆ Increased effectiveness of parent training (fewer drop-outs, greater gains and better maintenance) is associated with younger children, higher IQ, less co-morbidity, less severe conduct problems, less socio-economic disadvantage, lower parental discord, higher parental global functioning and absence of antisocial behaviour in parents. **(1a)**
- ◆ Media based behavioural treatments using parent training tapes without significant therapist input and reports have only very moderate effects. **(1b)**
- ◆ Problem-solving skill training for children, in combination with parent training, is an effective intervention for conduct problems in children aged 8-12 years. **(1b)**
- ◆ Helping parents deal with their own problem solving in relation to life stress, offered as an adjunct to parent training with problem solving skills training for the child, appears to improve both child and adult outcomes. **(1b)**
- ◆ Whilst mild conduct problems in children under 11 are ameliorated with the help of social cognitive intervention programs, social skills training and anger management skills training, there is no evidence for the use of these approaches on their own with more chronic and severe cases. **(1b)**
- ◆ Parent training for conduct problems in adolescents appears to have limited effectiveness. **(1b)**
- ◆ Evidence for the effectiveness of stand alone CBT, problem solving approaches and anger management programs for adolescents remains weak. **(2b)**

### **Psychodynamic Therapies**

- ◆ There is insufficient evidence to draw conclusions about the effectiveness of psychodynamic child psychotherapy.

### **Systemic Family Therapies**

- ◆ Functional family therapy incorporating elements of cognitive behavioural approaches into a systemic model concentrating on changing maladaptive interactional patterns

and improving communication and structural family therapy (also described as Family Effectiveness Training or Brief Strategic Family Therapy) have been shown to be effective in reducing behaviour problems and recidivism in adolescents who have multiply offended. **(1b)**

### **Multi-Modal Therapies**

- ◆ Re-offending rates in adolescents are most likely to be reduced by multi-modal, behavioural and skills-orientated treatment programmes. **(1a)**
- ◆ The strongest evidence is for multi-level, relatively intensive, community-based, highly structured and well integrated programmes focusing on changes which reduce opportunities for offending (e.g. family monitoring and supervision of the adolescent). **(1b)**
- ◆ Multi-systemic therapy involving multiple interventions delivered in a planned and integrated manner, chiefly by a single practitioner working intensively with a child and family is the most effective treatment for delinquent adolescents in reducing recidivism and improving individual and family functioning although its superiority to a fully comprehensive community mental health service such as ideally offered by CAMHS has not been unequivocally established. **(1b)**

### **Other Psycho-Social Approaches**

- ◆ Therapeutic foster care has been shown to reduce the rate of recidivism, to increase placement stability in a hard to place population and to improve social skills. **(1a)**

### **Physical Treatments**

- ◆ Psychostimulants have been shown to be effective in reducing antisocial behaviours in children and adolescents with co-morbid ADHD/ADD, independent of the effect of these medications on attention deficit and hyperactivity symptoms. **(1b)**
- ◆ Lithium has been demonstrated to be effective in reducing explosive aggressive outbursts in hospitalised groups. **(1b)**
- ◆ Traditional anti-psychotic medication appears to be effective in the reduction of aggressiveness but is associated with sedation and interference with learning, as well as other more severe side effects. **(2a)**
- ◆ Low dose risperidone has been shown to be effective in reducing aggressive behavior. **(1a)**
- ◆ Some studies have shown a response to the use of carbamazepine and other anti-convulsants in reducing aggressive outbursts, but better controlled studies have not supported these initial findings. **(1b)**
- ◆ Clonidine has been shown, in small-scale open trials, to reduce destructive and aggressive behaviour but no randomised control trials have yet been conducted. **(2a)**

# Disturbances of Conduct *continued*

## **Implications for practice**

- **Parent training is the treatment of choice for conduct problems in children under 10 years old, particularly those with moderate severity, less co-morbidity and less social disadvantage. (A)**
- **For older children (8–12 years) and for more severe presentations, parent training should be combined with individual interventions that provide problem solving and social skills training. (A)**
- **Individual approaches for adolescents, if used either on their own or in combination with systemic interventions, should focus on reducing opportunities for delinquent behaviour and on increasing skills such as problem solving or coping. (B)**
- **For adolescents and young people with moderate conduct problems, functional or structural family therapy, where appropriate combined with cognitive behavioural therapy, should be considered. (B)**
- **Whilst the evidence suggests Multi-Systemic Therapy is currently the most effective intervention for severe and enduring disturbance of conduct in adolescents, it is recognised that this approach involves high levels of professional resources which will need to be carefully targeted. (A)**
- **Specialist foster placement with professional support should be considered as part of multi-agency interventions for adolescents with chronic and enduring conduct problems. (A)**
- **Medication should probably not be used as the first line of treatment for conduct problems. (B)**
- **The use of psychostimulants for children with co-morbid ADHD should be considered when adequate therapeutic change has not been achieved by psychosocial treatments alone. (D)**
- **The use of novel antipsychotics with combined dopaminergic and serotonergic action, such as risperidone, may be cautiously considered for children and young people who have not been responsive to a comprehensive trial of psychosocial treatments. (B)**

# Disturbances of Attention

Covers diagnostic categories: attention deficit hyperactivity disorder (ADHD), hyperkinetic disorder.

## Statements from the evidence

### Behaviour Therapies, Cognitive

#### Behavioural Therapies and Parent Training

- ◆ Behaviour therapy has been shown to be more effective than no treatment controls, and contributes to improvements in on-task behaviour and a reduction in disruptive and rule-breaking behaviour. **(1b)**
- ◆ The addition of behaviour therapy to stimulant medication does not confer an additional benefit at end of treatment. However, it may enable benefit to be established at a lower dose of medication and allow earlier discontinuation of medication, and has been shown to produce some additional benefit at longer term follow up. **(1b)**
- ◆ The combination of behaviour therapy and stimulant medication has been shown to be more effective than medication alone for ADHD with co-morbid anxiety. **(1b)**
- ◆ Improvements from behavioural interventions in one setting do not generalise to other settings. **(1b)**
- ◆ The addition of a cognitive approach to behavioural therapy does not result in improved clinical outcome. **(1b)**
- ◆ Parent training has been found to increase child compliance and reduces the time for

task completion. It also appears to improve parental self-esteem and reduces parental stress. However, compliance with this approach is lower for parents with less educational attainments. **(1b)**

- ◆ There is evidence that social skills training does not improve social relationships. **(1b)**
- ◆ There is some evidence of greater parent and teacher satisfaction with behavioural treatments in contrast with medication **(2b)**

### Psychodynamic, Systemic and Multi-Modal Therapies

- ◆ There is insufficient evidence to draw conclusions about the effectiveness of psychodynamic child psychotherapy, systemic family therapy and multi-modal therapy.

### Physical Treatments

- ◆ Stimulants (methylphenidate and dexamphetamine) have been demonstrated to be effective and can lead to normalisation of attention, activity and impulsivity irrespective of age in 75% of treated children. **(1a)**
- ◆ Stimulant medication may produce mild growth suppression which is more marked in children receiving continuous treatment compared with those receiving 'holiday' breaks. **(1b)**
- ◆ Stimulants are beneficial when there is co-morbidity with the following: conduct

# Disturbances of Attention *continued*

disorder, anxiety, generalised learning disability and specific learning disability. **(1b)**

- ◆ When stimulants are used with children with co-morbid conduct disorder, as well as reducing the primary symptoms of ADHD, the level of verbal and physical aggression are reduced. **(1b)**
- ◆ Stimulants may be beneficial when there is a co-morbid pervasive developmental disorder. **(1b)**
- ◆ Stimulants appear to be effective and safe for the treatment of ADHD in the presence of well-controlled epilepsy. As there has only been one randomised controlled trial, caution is required. **(1b)**
- ◆ Long acting stimulants have been shown to be as effective as short acting stimulants but may have a different side effect profile. **(1b)**
- ◆ Atomoxetine has been demonstrated to be effective in reducing the core symptoms of inattention, over activity and impulsivity in treated children. **(1b)**
- ◆ Atomoxetine has a different side effect profile to stimulant medication with minimal impact on appetite and sleep. However, recent reports suggest liver complications may be a rare side effect. **(1b)**
- ◆ Clonidine has been shown to be effective in reducing motor activity and increasing compliance, as well as reducing levels of irritability. The effect size appears to be lower than that of stimulants but higher than that obtained from treatment with tricyclic anti-depressants. **(1a)**
- ◆ Tricyclic anti-depressants have been shown to be beneficial in the treatment of the primary symptoms of ADHD at all ages, but they are not as effective as stimulants and the risk of side effects is higher. **(1a)**
- ◆ Tricyclic anti-depressants have been shown to be effective in the presence of co-morbid depression, anxiety and conduct disorder. **(1a)**
- ◆ Bupropion has been shown to be effective. However, there is a significant risk of side effects, including the precipitation of a psychotic illness. **(1b)**
- ◆ The newer selective monoamine oxidase inhibitors, such as moclobemide, may improve attention and concentration span but have less impact on impulsive and hyperactive behaviours. **(2b)**
- ◆ Carbamazepine has been shown to be beneficial in the treatment of ADHD but there is a greater risk of side effects than with stimulants. **(1a)**
- ◆ In children with food intolerance, there is evidence to support the effectiveness of individually targeted exclusion diets. **(1b)**
- ◆ Dietary supplementation with omega-3 and

omega-6 fatty acids whilst having no effect on the motor skills of children with developmental coordination disorder (DCD) has been shown to have a significant positive effect on reading and spelling, and on ADHD related behaviours. **(1b)**

## **Implications for practice**

- **If diagnostic criteria for ADHD are met following a comprehensive assessment by a suitably qualified professional, and other reasons for the behaviour have been excluded, then a trial of medication is indicated as the first line of intervention. (A)**
- **If there is insufficient response to medication, then parent training and individual behavioural therapy with the child should be added. (A)**
- **Discontinuous medication (i.e. holiday breaks) may reduce the risk of mild growth suppression. (A)**
- **Behavioural intervention in addition to medication can also be offered as a way of achieving similar outcomes to medication alone but with reduced levels of medication. (B)**
- **Where individual behavioural interventions are used, these need to be provided in the child's school as well as within the home as they do not generalise across settings. (A)**
- **For children with co-morbid anxiety, combination treatment of stimulant medication and behavioural interventions should be considered. (A)**
- **Stimulant medication can be given, along with appropriate psychosocial treatments, when there are co-morbid problems, such as conduct disorder, Tourette's Syndrome and social communication disorders. Medication can also be given in the presence of learning disabilities and epilepsy. (A)**
- **Children should be started on a short acting preparation of methylphenidate or on dexamphetamine. (A)**
- **Atomoxetine is probably the evidence based second line treatment, but although there is relevant RCT evidence to support effectiveness this is a new drug and reports of side effects need to be monitored. (A)**
- **As it is not possible to predict which dose will be effective, dosage should be increased within safe limits until an effect is achieved. (A)**
- **If there is insufficient resolution of symptoms with stimulants or atomoxetine, then other medication should be considered. The alternatives include: clonidine, selective serotonin reuptake inhibitors, tricyclic anti-depressants and selective monoamine oxidase inhibitors. (A)**

# Disturbances of Attention *continued*

- ***Expert opinion recommends the combination of clonidine and stimulants when there is a partial response to stimulants alone, rebound effects, insomnia, impulsiveness or emotional lability. (D)***
- ***Effective monitoring of children given medication is needed to minimise adverse side effects and optimise treatment benefits. (A)***
- ***There is some evidence to support the use of omega 3 and 6 dietary supplementation. (A)***

# Anxiety Disorders

Covers diagnostic categories: generalised anxiety disorder (GAD), obsessive-compulsive disorder (OCD), separation anxiety disorder (SAD), agoraphobia, panic disorder, specific phobia, social phobia.

## Statements from the evidence

### Behaviour Therapies and Cognitive Behavioural Therapies

- ◆ Overall, for over half the children treated in RCTs, the anxiety disorder remits with CBT. **(1a)**
- ◆ There is evidence that generalised anxiety can be effectively treated using cognitive behavioural therapy. **(1b)**
- ◆ For children under 11 with specific phobias, in vivo exposure is particularly beneficial (in contrast to more cognitive techniques) and the support of parents has a positive effect. However, it appears that various forms of brief therapeutic input (cognitive behavioural therapy, supportive psychotherapy) may only accelerate spontaneous improvement that might occur in this age group. **(1b)**
- ◆ Flooding, via rapid return to school, can be successful in managing school refusal but may not be more effective than 'educational support' (this involves information about the nature and treatment of anxiety disorders, together with therapeutic listening and clarification). **(1b)**
- ◆ Individual case studies suggest that the inclusion of behavioural prescriptions, in addition to non-prescriptive anxiety management techniques, facilitates greater and more rapid improvement. **(2b)**

- ◆ Cognitive behavioural therapy for childhood anxiety disorders can be successfully delivered in a group, or family, as well as in an individual format, and it may be especially helpful if parents are included, for children under 11 and where there is high parental anxiety. **(1a)**

### Psychodynamic Therapies, Systemic Family Therapies and Other Psychosocial Approaches

- ◆ There is insufficient evidence to draw conclusions about the effectiveness of psychodynamic child psychotherapy, systemic family therapy and other psychosocial approaches.

### Physical Treatments

- ◆ Clomipramine and selective serotonin reuptake inhibitors are all significantly more effective than placebo in the treatment of OCD. **(1b)**
- ◆ Selective serotonin reuptake inhibitors have been shown to be more effective than psychoeducational pamphlets in the treatment of social anxieties. **(1b)**
- ◆ There are preliminary indications that cognitive behavioural therapy with medication might be better than medication alone for OCD. **(1b)**
- ◆ The efficacy of benzodiazepines, 5-HT agonists, beta-blockers, tricyclic



# Anxiety Disorders *continued*

antidepressants (other than clomipramine) or selective serotonin reuptake inhibitors for anxiety disorders other than OCD have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn.

- ◆ A side effect of tricyclic antidepressants is to increase the small risk of sudden death from cardiac failure, and of long-term electrocardiographic changes. **(3)**
- ◆ Selective serotonin reuptake inhibitors produce less serious side effects than tricyclic antidepressants. **(3)**

- ***Clomipramine and selective serotonin reuptake inhibitors should be considered in the treatment of OCD when cognitive behavioural therapy alone has proved ineffective. (A)***
- ***Selective serotonin reuptake inhibitors should be considered in the treatment of social anxieties when cognitive behavioural therapy alone has proved ineffective. (A)***

## ***Implications for Practice***

- ***Behaviour therapy and cognitive behavioural therapy (whether in group or individual format) should be considered the first-line treatment for children with specific phobias and children with generalised anxiety. (A)***
- ***Behaviour therapy and cognitive behavioural therapy should be considered for children with OCD. (A)***
- ***Parents should be included in cognitive behavioural therapy where the child is under 11 or where there is high parental anxiety. (B)***
- ***'Educational support' should be considered in the management of children with anxiety problems. (B)***

# Post Traumatic Stress Disorder

## **Statements from the evidence**

### **Behavioral Therapies and Cognitive**

#### **Behavioral Therapies**

- ◆ A number of studies, particularly in children aged 7 and over who have been sexually abused, suggests that individual trauma focused CBT delivered to children and young people with PTSD may be of value. **(1b)**
- ◆ Delivering CBT to the mother as well as the child does not appear to lead to any benefit over treatment of the child alone in regards to the PTSD symptoms. However CBT for the mother only has been shown to reduce severity of PTSD symptoms in the child at 2 year follow up. **(1b)**

- ◆ Studies with adults suggest trauma-focused CBT within the first month may be beneficial if symptoms are severe. **(1b)**

### **Eye Movement Desensitisation and Reprocessing (EMDR) EMDR**

- ◆ Two studies indicate Eye Movement Desensitisation and Reprocessing (EMDR) may be effective, but further studies are required. **(3)**

### **Debriefing**

- ◆ A number of randomised controlled trials with adults and one with children have found that debriefing, that is providing a systematic, brief, single session intervention focusing on the traumatic incident shortly after the trauma does not lead to clear benefit in comparison to no treatment. **(1b)**

### **Psychodynamic, Systemic and Multi-Modal Therapies**

- ◆ There is insufficient evidence to draw conclusions about the potential effectiveness of psychodynamic child psychotherapy, systemic family therapy and multi-modal therapy.

### **Physical Treatment**

- ◆ There is no conclusive evidence that drug treatment is beneficial for PTSD in children. **(3)**

## **Implications for practice**

- **Debriefing should not be offered routinely immediately following a trauma (A)**
- **Children and young people with PTSD, including those who have experienced traumatic events other than sexual abuse, should be offered a course of trauma-focused cognitive behaviour therapy adapted appropriately to suit their age, circumstances and level of development. (B)**
- **Trauma-focused cognitive behavioural therapy should be offered to older children with severe symptoms of PTSD in the first month after the traumatic event. (C)**
- **Drug treatments should not be routinely prescribed for children and young people with PTSD. (C)**

# Depressive Disorders

Covers diagnostic categories: major depressive disorder (MDD), dysthymic disorder (DD).

## Statements from the evidence

- ◆ There is a high rate of spontaneous remission amongst untreated children, although there are high rates of relapse amongst both treated and untreated groups. **(3)**

## Behaviour Therapies and Cognitive Behavioural Therapies

- ◆ The overall evidence for the effectiveness of individual CBT is inconclusive. In some studies CBT is no more effective than waitlist or general clinical management but in other studies it has been shown to be more effective than comparison treatments (relaxation therapy, non-directive supportive therapy). **(1a)**
- ◆ CBT may speed up the recovery compared with no treatment and may reduce the length of the depressive episode compared with other treatments. These differential effects were not sustained at longer term follow-up although this was mainly due to ongoing improvements of comparison conditions. **(1b)**
- ◆ Group CBT and brief non-directive therapy may be effective treatments for mild depression. **(1b)**

## Psychodynamic and Systemic Family Therapies

- ◆ There is inconclusive evidence for the effectiveness of family therapy in the

treatment of depression. **(2b)**

- ◆ Evidence from one comparison study suggested brief 30 session psychotherapy may be an effective treatment. **(2b)**

## Other Psychosocial Approaches

- ◆ Interpersonal Psychotherapy (IPT) is effective in reducing depressive symptoms although evidence in achieving remission is inconclusive. In direct comparison with CBT there was no difference in outcome between the two treatments. **(1a)**

## Physical Treatments

- ◆ Tricyclic antidepressants have been found to be no better than placebo **(1a)**
- ◆ Of the selective serotonin reuptake inhibitors (SSRIs), fluoxetine has the safest benefit/harm ratio. **(1a)**
- ◆ Compared with placebo, fluoxetine produced clinically important improvement in clinical symptoms and improved likelihood of remission. **(1a)**
- ◆ There is some evidence that fluoxetine in combination with CBT is more effective in reducing depressive symptoms, reducing the risk of suicidal ideation and producing global clinical improvement than fluoxetine alone. **(1b)**

## **Implications for Practice**

- **Given the high rate of remission in control groups, initial psychological treatment (either CBT, family therapy or IPT) for up to three months should be offered as the first line of treatment. (B)**
- **If psychological treatment does not produce improvement in symptoms by six weeks, anti-depressant medication should be offered for adolescents (and cautiously considered for younger children) in combination with longer term psychological treatment using either CBT, psychotherapy or family therapy. (A)**
- **Depression is a condition which is liable to recur. Clinical follow-up and 'booster sessions' may be helpful in reducing relapse. (B)**

# Psychotic Disorders

Covers diagnostic categories: schizophrenia, bipolar disorder.

## Statements from the evidence

### Psycho-Social Therapies

- ◆ Psychosocial interventions with children and young people with psychotic disorders have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn. In adults there is some evidence to support CBT and family therapies but their value for children and young people has not been established.

### Physical Treatments

- ◆ Traditional neuroleptic medication has been demonstrated to reduce acute positive symptoms in schizophrenia. **(1b)**
- ◆ A number of open trials and case studies support the use of neuroleptics for bipolar disorders. **(3)**
- ◆ Clozapine has been shown to be effective against both positive and negative symptoms of schizophrenia but has significant adverse side effects. **(1b)**
- ◆ There is evidence to support the use of lithium in the acute phase of manic/bipolar disorder. **(1b)**
- ◆ There is some evidence to support the use of lithium as long-term prophylactic medication for bipolar disorder. **(3)**
- ◆ A number of open trials and case reports

indicate the value of other atypical neuroleptics over traditional neuroleptic medication for children with schizophrenia

**(3)**

- ◆ Open trials and case reports suggest carbamazepine and divalproex sodium may be effective treatments for bipolar disorder in children and young people. **(3)**
- ◆ Electro-convulsive therapy (ECT) for the treatment of schizophrenia or bipolar disorder has not been sufficiently evaluated in research studies for any firm conclusions about its effectiveness to be drawn.

## Implications for Practice

- **Neuroleptics are the treatment of choice for the acute phase of schizophrenia. (A)**
- **Because of the side effects of traditional neuroleptics atypical neuroleptics should normally be used, although caution should be exercised as these too have side effects. (B)**
- **Clozapine should be cautiously considered in cases of treatment resistant schizophrenia, in line with the nationally agreed protocol (A)**
- **Lithium should be considered in the first instance in the acute phase of manic/bipolar disorder. (B)**

- ***Lithium should be considered for long term prophylactic use in bipolar disorder.***  
**(C)**

# Eating Disorders

Covers diagnostic categories: *anorexia nervosa*, *bulimia nervosa*.

## **Statements from the evidence**

### **Behaviour Therapies**

- ◆ Operant conditioning used in hospital settings has been shown to be effective in short-term weight gain. **(2b)**

### **Systemic Family Therapies**

- ◆ Family therapy (behavioural/structural) is an effective treatment for *anorexia nervosa* in young people, and is more effective than individual therapy where the illness is not chronic. **(1b)**
- ◆ However, there is insufficient evidence to determine whether conjoint (i.e., patient and parents meet together) or separated forms of family therapy (i.e., therapist meets patient and parents separately) are more effective. **(1a)**

### **Cognitive behavioural therapy and Psychodynamic Therapy**

- ◆ Individual psychodynamic therapy shows benefit in those with late-onset *anorexia* and may contribute to the prevention of relapse after discharge from hospital treatment. **(1b)**
- ◆ Extrapolation from adult literature suggests that individual therapies such as interpersonal therapy (short-term non-introspective psychotherapy), behaviour therapy and cognitive behavioural therapy may be helpful in relation to *bulimia* but these have been insufficiently studied in

relation to children and young people for any clear recommendations to be made. **(4)**

### **Multi-Modal Treatments**

- ◆ There is clinical consensus that multifaceted treatment programmes (including individual psychotherapy, behaviour therapy and family therapy) may be the most effective approach to *anorexia* but they have been insufficiently researched for any firm conclusions to be drawn. **(4)**

### **Physical Treatments**

- ◆ Physical treatments for *anorexia* and *bulimia* have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn, however clinical consensus suggests that early intervention and hospitalisation (including re-feeding) are likely to be helpful, especially for young children and those with severe emaciation (less than 70% of average weight). **(4)**

## **Implications for Practice**

- **Family therapy (behavioural/structural) is recommended as the treatment of choice for *anorexia nervosa*, either as an out-patient or after in-patient treatment. (A)**
- **Behavioural treatment should be considered in hospital in order to increase weight. (B)**

- ***Older adolescents with bulimia nervosa may be treated with CBT adapted as needed to suit their age, circumstances and level of development. (C)***
- ***Early identification and treatment of anorexia nervosa is suggested, with re-feeding as necessary. (D)***



# Deliberate Self Harm

*Covers diagnostic categories: parasuicide.*

## **Statements from the evidence**

- ◆ Clinical consensus suggests that all children who self harm should be assessed by a professional with specialist child mental health training. **(4)**
  - ◆ There is evidence that approaches focusing on prevention of further suicide attempts may not be effective in the presence of co-morbid depression. **(1b)**
  - ◆ Brief intervention (problem solving) with families of adolescents following a suicide attempt can improve adolescents' feelings of depression and suicidality, enhance positive maternal attitudes towards treatment and reduce subsequent use of residential and foster care. **(1b)**
  - ◆ The limited number of trials comparing treatment as usual with enhanced care (involving 24 hour access to services) have not clearly demonstrated the advantages of the latter in terms of reduction in incidence of suicide attempts. **(1b)**
  - ◆ School based interventions can improve knowledge and attitudes amongst young people towards disclosure of self harm by their peers, but have not been shown to increase help seeking amongst high risk groups (in particular young men and those who have already self-harmed). **(1b)**
- ◆ Schools based programmes that inadvertently "glamorise" self harm e.g. via use of inappropriate materials, may increase self harm rates. **(2b)**
  - ◆ There is evidence that for adolescents who have repeatedly self harmed the addition of group therapy to treatment as usual reduces the likelihood of repetition. **(1b)**
  - ◆ The method of self harm amongst young people already referred to a specialist service does not necessarily indicate seriousness of intent (e.g. self cutting does not necessarily mean less serious intent than other forms amongst this population of young people). **(3)**

## **Implications for Practice**

- **Following a suicide attempt by a child or young person, brief interventions involving families should be considered. (B)**
- **Children who have harmed themselves should be assessed for psychological disturbance or mental health problems which, if present, should be treated as appropriate. (D)**
- **For young people who have self-harmed several times, consideration should be given to the addition of group psychotherapy. (B)**

- ***When instituting schools based interventions, selection of material should be made with reference to existing evaluated programmes. (A)***
- ***In assessing a young person in a CAMHS context presenting with self harm, seriousness of intent needs to be assessed whatever the nature of the self harm. (C)***

# Substance Misuse

*Covers diagnostic category: substance dependence.*

## **Statements from the evidence**

### **Education interventions**

- ◆ Psycho-educational programmes delivered to the general child/adolescent population have been found to be ineffective. **(1b)**

### **Systemic Family Therapies**

- ◆ Family therapy (behavioural/structural) has been shown to be superior to other treatment modalities, and has been shown to enhance the effectiveness of other approaches. **(1a)**
- ◆ Family psycho-education and family support groups alone have not been found to be effective. **(1a)**

### **Psychodynamic Therapies, Cognitive Behavioural Therapy and Behaviour Therapies**

- ◆ There is insufficient evidence to draw conclusions about the effectiveness of psychodynamic psychotherapy, cognitive behavioural therapy or behaviour therapy.
- ◆ Motivational interviewing has advantages over treatment as usual in reduction of substance misuse particularly cannabis, nicotine and alcohol. **(1b)**

### **Multi-Modal Treatments**

- ◆ Comprehensive community-based treatments, such as multi-systemic therapy (which include family therapy), have been shown to be effective in reducing substance misuse. **(1b)**

- ◆ Prevention approaches that include dealing with resistance skills, psychological inoculation, and personal and social skills training have been shown to significantly improve knowledge and to reduce drug use for periods of over one year. The unique contribution of each component in these types of multi-component therapy has not been established. **(2a)**

### **Physical Treatments**

- ◆ Pharmacological treatments for substance misuse in children and young people have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn.

## **Implications for Practice**

- **Family therapy should be considered the first line treatment of substance misuse. (A)**
- **Multi-systemic therapy should be considered where substance misuse is part of a wider pattern of problems. (B)**
- **In the light of the success of preventive approaches, skills-oriented resilience-enhancement programmes should be considered in schools and other community settings. (C)**

# Pervasive Developmental Disorders

Covers diagnostic categories: social communication disorders, childhood autism, atypical autism, Asperger's syndrome, Rett's syndrome, childhood disintegrative disorder.

## Statements from the evidence

- ◆ Early recognition and/or intervention for childhood autism may reduce later difficulties. **(3)**

## Psychosocial Approaches

- ◆ Psychosocial interventions with children with forms of pervasive developmental delay other than autism have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn.

## Behaviour Therapies, Cognitive

### Behavioural Therapies and Parent Training

- ◆ Intensive behavioural treatment (e.g. an intensive educational intervention such as LOVAAS), including parent training, may improve IQ, language and social skills, and decrease aggression in children with autism. **(1b)**
- ◆ Training of siblings to elicit speech from their autistic brother or sister; integrated playgroups in a school setting and school programs such as TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children) may each help improve social skills of children with autism. **(3)**
- ◆ The evidence for auditory integration training (which focuses on reducing hypersensitivity to sound) and other sound

therapies is inconclusive. **(1a)**

- ◆ There is no evidence that individual social skills training significantly benefits children with autism. **(2a)**
- ◆ Although no studies have been conducted, clinical opinion suggests that social skills training may be effective in the treatment of Asperger's syndrome. **(4)**

## Other Therapies

- ◆ Holding therapy with children with autism (whereby the child is held regardless of whether it comforts or distresses him or her) has not been sufficiently evaluated in research studies for any firm conclusions about its effectiveness to be drawn.

## Physical Treatments

- ◆ No physical treatments have been shown to affect the core cognitive symptoms and symptomatology of autism.
- ◆ Haloperidol and risperidone have beneficial effects on hyperactivity, stereotypy, preoccupations and disruptive behaviour in autism. **(1b)**
- ◆ Naltrexone decreases hyperactivity in autism. **(1b)**
- ◆ Clomipramine reduces autistic withdrawal and preoccupations, hyperactivity and oppositionality. **(1b)**

# Pervasive Developmental Disorders *continued*

- ◆ Psychostimulants have reduced hyperactive behaviour with no increase in stereotypes or other autistic behaviours in children with autism and ADHD. **(1b)**
- ◆ Fenfluramine has been found to be an ineffective treatment for autism. **(2a)**

## ***Implications for Practice***

- ***Intensive behavioural interventions, either individual or group, should be considered to help improve the adaptive behaviour of children with autism. (B)***
- ***Medication is not indicated for the treatment of core symptoms of autism but may be used to reduce specific behaviours associated with autism in children. (B)***

# Tourette's Syndrome

## **Statements from the evidence**

### **Psychosocial Approaches**

- ◆ Evidence for the effectiveness of psychosocial interventions is inconclusive, but expert advice suggests reassurance to parents, liaison with schools and reduction of external stressors for the child or young person. **(4)**

### **Physical Treatments**

#### **Treatment of Tourette's Syndrome with co-morbid disorders**

- ◆ Risperidone, haloperidol and pimozide have been found to significantly reduce the severity and frequency of tics, but there are side effects. Although pimozide is less sedating than haloperidol, it has a greater risk of ECG abnormalities. **(1b)**
- ◆ Clonidine has been shown to significantly reduce the number and severity of motor tics, but it demonstrates no improvement in vocal tics. **(1b)**

#### **Treatment of Tourette's Syndrome with co-morbid disorders**

- ◆ Where tics and ADHD co-exist, there is evidence that psychostimulants are beneficial to ADHD without a significant increase in tic severity, although patients may require additional medication for the tics. **(1b)**
- ◆ Clonidine has been shown to be effective and superior to placebo in treating both tics

and co-morbid symptoms of ADHD, but may cause drowsiness. **(1b)**

- ◆ There is some evidence that tricyclic antidepressants are effective for children with ADHD and tics but may cause drowsiness and ECG abnormalities. **(2a)**
- ◆ Selective serotonin reuptake inhibitors have been shown to be effective in obsessive compulsive disorder. There is insufficient evidence to suggest that the presence of tics is a contraindication to their use although co-morbid Tourette's syndrome may lower their effectiveness with OCD symptoms. **(2a)**

## **Implications for Practice**

- **Neuroleptics and clonidine should be considered as first choice treatments for Tourette's syndrome. Since the evidence for effectiveness does not differentiate between them, the decision as to which medication to use may be based on the clinician's and family's view of the different side effects. The atypical neuroleptics usually have fewer side-effects (A)**
- **The use of pimozide should be considered only as a second line treatment given its side effects. (C)**
- **The presence of tics is not a contraindication to the use of methylphenidate in the treatment of ADHD. (A)**

# Tourette's Syndrome *continued*

- ***Selective serotonin reuptake inhibitors should be considered in Tourette's syndrome with co-morbid OCD, but the response may be less favourable than in OCD without co-morbidity. (B)***
- ***Clinical consensus suggests that best practice involves reassurance to parents, liaison with schools and reduction of external stressors for the child or young person. (D)***

# Coping with physical symptoms with no known cause

Covers diagnostic categories: somatisation disorder, undifferentiated somatoform disorder, conversion disorder, pain disorder, hypochondriasis.

## **Statements from the evidence**

### **Behaviour Therapies and Cognitive Behavioural Therapies**

- ◆ Cognitive behavioural techniques, combining progressive muscular relaxation, self-monitoring, distraction and positive self-statements by children, and distraction and contingency management of pain and non-pain behaviours by parents, have been shown to be effective in the management of recurrent abdominal pain. **(1b)**
- ◆ Cognitive behavioural approaches to physical symptoms other than recurrent abdominal pain have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn, but expert advice suggests cognitive behavioural therapy management similar to that used for recurrent abdominal pain. **(4)**

### **Psychodynamic, Systemic and Other Therapies**

- ◆ Psychodynamic, systemic and other therapies have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn.

### **Physical Treatments**

- ◆ Evidence from one randomised controlled trial suggests that a high fibre diet leads to a reduction in attacks of recurrent abdominal

pain, but this finding needs to be replicated. **(1b)**

## **Implications for Practice**

- **Cognitive behavioural therapy should be considered for recurrent abdominal pain. (A)**
- **Cognitive behavioural therapy should be considered in the use of other physical symptoms with no known cause. (D)**
- **If attention to diet has not already been considered, trial of a high fibre diet is indicated for recurrent abdominal pain. (B)**



# Coping with painful procedures

*Includes children and young people who are undergoing painful procedures i.e. medical procedures such as venepuncture.*

## **Statements from the evidence**

### **Behaviour Therapies and Cognitive Behavioural Therapies**

- ◆ Parental presence may be helpful in reducing procedural distress if parents can be coached to promote distraction and/or active coping. **(1b)**
- ◆ Rocking of newborns and distraction in younger children are effective in reducing the distress caused by venepuncture. **(1b)**
- ◆ In older children, cognitive behavioural strategies which promote more active coping and which give the child a sense of mastery and predictability reduce procedural distress. **(1b)**
- ◆ Cognitive behavioural interventions may also be effective as an adjunct to pharmacological treatments. **(1b)**
- ◆ Hypnosis has been shown to decrease procedural distress and the somatic symptoms associated with chemotherapy. **(1b)**

### **Psychodynamic, Systemic and Other Therapies**

Psychodynamic, systemic and other therapies have not been sufficiently evaluated in research studies for any firm conclusions about their effectiveness to be drawn.

## **Implications for Practice**

- ***Cognitive behavioural therapy, behaviour therapy and hypnosis should be used to counter the stress associated with painful procedures and selected according to the particular types or stages of procedure as well as the developmental stage of the individual child. (A)***

# Coping with chronic physical illness and disease

*Includes children and young people who are in pain due to longstanding physical causes e.g. diabetes or asthma.*

## **Statements from the evidence**

### **Behaviour Therapies and Cognitive**

#### **Behavioural Therapies**

- ◆ Education alone for children with chronic illness increases knowledge about that illness but is insufficient to bring about changes in illness management. **(1b)**
- ◆ Illness specific, multi-component cognitive behavioural interventions, including various combinations of education, trigger recognition, relaxation, problem-solving skills and stress reduction, have been shown to be effective in improving physical status in asthma, diabetes and other chronic illnesses. **(1b)**
- ◆ The use of electromyographic biofeedback to reduce facial muscle tension is associated with improved physical state in the short term in asthma. **(1b)**
- ◆ Combined education and stress management programmes for children with asthma are effective in reducing associated emotional and behavioural problems. **(1b)**
- ◆ Cognitive behavioural interventions, targeted at families and peer groups rather than individuals, have also been shown to improve physical status in diabetes. **(2b)**
- ◆ Thermal biofeedback and progressive muscular relaxation, either alone or in

combination, are superior to other psychological treatments in the management of headache. **(1a)**

- ◆ Relaxation training delivered in a self-help format is effective in reducing headaches. **(1b)**
- ◆ Broad-based interventions aimed at providing education and support, delivered in the community by nurses with minimal training in psychological intervention, may prevent later adverse physical and psychological outcomes of chronic illness. **(1b)**

### **Systemic Family Therapies**

- ◆ Systemic family therapies are effective in improving physical status in asthma. **(1b)**

### **Psychodynamic Therapies**

- ◆ Intensive psychoanalytic psychotherapy may improve diabetic control in children in hard to control diabetes. **(2a)**

## **Implications for Practice**

***The interventions recommended below should be considered as adjuncts to routine medical treatment***

- ***Cognitive behavioural therapy and behaviour therapy, tailored to specific illnesses, should be considered for children with hard to control physical symptoms. (A)***

# Coping with chronic physical illness and disease

*continued*

- ***Psychoanalytic psychotherapy should be considered for the treatment of hard to control diabetes. (B)***
- ***Systemic family therapy should be considered for the treatment of asthma. (B)***
- ***Provision of specialist nurse support to families of children newly diagnosed with chronic illness should be considered as a means of improving later physical and psychological outcomes. (B)***

# Appendix I

## **Summary of process of undertaking the original review (2002)**

The search strategy for the original review consisted of a combination of computer-based and hand searches. All the major databases, including MedLine and PsycLit/PsycInfo, were searched by computer using 100 terms referring to different aspects of child and adolescent mental health. The results of these searches were combined with 22 terms describing treatments. In addition, all articles included in large meta-analyses of child treatments were reviewed, and the bibliographies of reviews and primary studies examined.

The computer search identified 5,375 abstracts, which were reviewed. From this corpus, 743 papers were selected. The review team then amended this coverage with a hand search, which yielded a large number of further studies, particularly through the follow-up of bibliographies in primary studies and review papers. Overall, 830 primary studies were identified and 648 further reports, which either reviewed the treatment literature, reported clinical experience or offered advice and opinion, pertinent to child psychiatric treatments in the areas covered. The search covered the period up to the end of 1998. Hand searches of major journals covered the most recent period (1999-2000). A significant number of early studies were reviewed but discarded when methodological improvements in the more recent literature made these findings obsolete.

To be included in the review, reports of research had to satisfy criteria of relevance, outcome and design.

**Relevance:** Studies that reported evaluations of interventions with one or more of the target disorder populations of children and adolescents were reviewed. The review team only included interventions that fell in the domain of the health service or services accessible to health service providers. Macro-social, legislative and economic interventions, for example, have been excluded.

**Outcome:** Studies were selected only if they reported outcomes which were either directly related to the disorder (e.g. symptom reduction) or to intermediary variables. In the latter case, the reviewers had independent evidence of an impact on mental health associated with that outcome (e.g. major risk factors such as educational progress in conduct disordered children) or an impact on mental health was plausible (e.g. family dysfunction). The reviewers were inclusive in their approach. Emphasis was placed on interventions that examined the direct impact on mental health or the intermediate (preventative) impact on risk factors, but studies with less well focused outcome information were also frequently covered.

**Design:** The review focused on studies that used an experimental or quasi-experimental study design. Observational studies, such as cohort or case studies, were also considered for review, but possible effects of this bias were

# Appendix I *continued*

indicated throughout. This was a necessary relaxation of normal exclusion criteria because a preliminary exploration of the available evidence indicated that the exclusion of poorly controlled studies would drastically curtail the available database to a point where the meaningfulness and relevance of the review might well be seriously jeopardised. The initial plan to exclude studies which did not meet the criteria specified by the Cochrane Collaboration proved impractical. In order to maintain maximum comparability between the Cochrane Collaboration's work and that of the review, the review team reviewed all the available evidence, highlighting the methodological shortcomings and cautioning readers to interpret the results with appropriate care.

Initially, then, the selection criteria for studies to be included in the review were: (a) group design involving random assignment; (b) well-documented treatment procedures; (c) uniform therapist training, or clear manualisation of the protocol for administering medication, and evidence of adherence; (d) clinically referred samples or treatment candidates; (e) outcome assessment, including at least two outcome levels (e.g. level of symptoms, adaptation, mechanisms, transactions or service utilisation); (f) tests of clinical significance; (g) assessment of long-term outcome (follow-up greater than six months). These criteria were rejected as unrealistic when preliminary coding revealed that only 7.4% of studies in child and adolescent mental health met the first of these criteria - rigorous randomisation.

Hence, the key selection criteria for acceptance into the review were as follows:

- ◆ A clear description of the patient population in the study, either in terms of diagnosis or in terms of specific problems addressed in the treatment;
- ◆ The study was reported in the English language;
- ◆ The study had a group design, or an experimental single-case design;
- ◆ There was a systematic effort at the measurement of outcome, including at least pre- and post-test measurement on an objective instrument.

Other reviews of this literature have been forced to make similar compromises. For example, the American Psychological Association's Division 12 Task Force on empirically supported treatment for children and adolescents were not able to apply fully the criteria of the Chambless Task Force on promotion and dissemination of psychological procedures developed for an adult patient population, simply because in many areas the study design, particularly the size of experimental groups, was not up to the task.

It should be noted that there are several important limitations to this review. Firstly, while the review team aimed for exhaustive coverage of the literature, no doubt key contributions have been missed for a variety of administrative and practical reasons. Secondly, literature not published in the English language was not accessible to review. Thirdly, anecdotal case

reports, which represent a large proportion of the psychodynamic literature, for example, were not included. These reports almost inevitably failed to meet the criteria of clear description of the case and rarely included objective measures of outcome. Fourthly, the review team did not aggregate the studies using meta-analytic strategies. The central problem from the point of view of identifying evidence-based practice is the homogeneity assumption about the nature of the particular forms of treatment that must be made in meta-analyses. It was felt that there were too few studies using genuinely comparable treatment procedures for such aggregation to be justified. Finally, the conclusions can only be based on the evidence available - they may change dramatically as new data emerges and readers are encouraged to review the current document in the light of any recent findings.

### ***Summary of process to updating the review 2006***

For the 2006 review we were not in a position to undertake a new systematic review of the literature. However we were able to draw on NICE guidance, Cochrane reviews, Health Technology Assessments and expert guidance to ensure that all the key studies were included. Chapters already written were revised by the authors, in the light of new NICE guidance, relevant Cochrane reviews, or evidence from major randomised control trials. For each presenting problem, one member was set the task of extracting what they deemed to be the

key statements from the relevant NICE guideline and/or major recent research, in terms of psychosocial and physical treatment interventions available in clinical settings. These statements were circulated to the whole group, and discussed until everyone felt that a fair representation of the evidence being reviewed had been developed. On the basis of these discussions, a further set of statements outlining the implications for clinical practice were developed, which were also agreed by all members of the working group as being fair conclusions to draw from the available evidence.

The following sources were used:

#### **National Institute for Health and Clinical Excellence (NICE)**

[www.nice.org.uk](http://www.nice.org.uk)

#### **Centre for Reviews and Dissemination – Database of Abstracts and Reviews of Effects (DARE)**

[www.york.ac.uk/inst/crd/index.htm](http://www.york.ac.uk/inst/crd/index.htm)

#### **The Cochrane Collaboration**

[www.cochrane.org](http://www.cochrane.org)

# Appendix 2

## ***Summary of the defining characteristics of the main types of psychosocial interventions.***

### **Behavioural and Cognitive Behavioural Therapies**

Behavioural treatments aim to use the insights from learning theory to achieve specific changes in behaviour. Key techniques include exposure and response prevention, modeling and contingency management.

Cognitive treatments aim to change dysfunctional beliefs by employing a range of behavioural techniques, by psycho-education and by a structured form of Socratic questioning, whereby the individual is encouraged to first elucidate, and then challenge, certain of their core beliefs.

Behavioural and Cognitive Behavioural Therapies are usually highly structured and relatively brief (6-24 sessions). Children and/or parents may be seen individually, in groups or with other family members.

### **Systemic Family Therapies**

Systemic family therapies focus on the system rather than the individual, and attend to the connections between patterns of behaviour and beliefs within the system and the presenting problem.

Family therapies generally see the child as part of a family group, but may work on occasions with subsystems (e.g. the parents alone, the child

alone). These therapies are often open-ended but families are rarely seen more frequently than once a month, and the number of sessions is typically between 6 and 12.

### **Psychodynamic Psychotherapies**

Psychodynamic psychotherapies focus on unconscious processes in the individual child that are believed to underlie emotional and behavioural disturbance. These therapies seek to help the child recognise and understand aspects of his or her behaviour in the light of these unconscious processes. Psychodynamic psychotherapies are often intensive (once a week or more) and lengthy (40 sessions or more). The child is generally seen individually and parents or other carers are seen in parallel.

### **Multi-Modal Therapies**

A combination of the above approaches, sometimes involving additional elements.

# Appendix 3 Relevant NICE guidance

## **Disturbance of Conduct**

Technology Appraisal on Parent-training/education programmes in the management of children with conduct disorders – guidance, (July 2006)

## **Disturbances of Attention**

NICE Review of Technology Appraisal 13: Methylphenidate, atomoxetine and dexamfetamine for attention deficit hyperactivity disorder (ADHD) in children and adolescents (March 2006)

## **Anxiety Disorders**

NICE Guideline on Obsessive Compulsive Disorder for 8 years+ (November 2005)

NICE Guideline on Anxiety – Management of anxiety (panic disorder, with or without agoraphobia, and generalised anxiety disorder) in adults in primary, secondary and community care (Dec 2004)

## **Post Traumatic Stress Disorder**

NICE Guideline on Post-traumatic stress disorder (PTSD): The management of adults and children in primary and secondary care (March 2005)

## **Depressive Disorder**

NICE guideline on depression in children and young people (March 2006)

## **Psychotic Disorder**

NICE guideline on schizophrenia (adult specific) (2002)

## **Eating Disorder**

NICE guideline on eating disorders (aged 8 +) (2004)

## **Deliberate Self Harm**

NICE guideline on deliberate self harm (adult-focussed but with section on children and young people) (2004)

## **Substance Abuse**

NICE guideline on substance abuse (all ages) (2004)





### **Categories of Evidence:**

- 1a** Evidence from meta-analysis of randomised controlled trials;
- 1b** Evidence from at least one randomised controlled trial;
- 2a** Evidence from at least one controlled study without randomisation;
- 2b** Evidence from at least one other type of quasi-experimental study;
- 3** Evidence from descriptive studies such as comparative studies, correlation studies and case-control studies;
- 4** Evidence from expert committee reports or opinions, or from clinical experience of a respected authority, or both.

### **Strength of Practice Implications:**

- A** Directly based on category 1 evidence;
- B** Directly based on category 2 evidence or extrapolated from category 1 evidence;
- C** Directly based on category 3 evidence or extrapolated from category 2 evidence;
- D** Directly based on category 4 evidence or extrapolated from category 3 evidence.

**It is important to recognise that the evidence base has limitations and should always be responded to within the context of professional judgement and care. See pages 4–7 for discussion of these issues.**

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