Depression in Children and Young People

Identification and management in primary, community and secondary care

National Clinical Practice Guideline Number 28

developed by

National Collaborating Centre for Mental Health

commissioned by the

National Institute for Clinical Excellence

published by

The British Psychological Society

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN 1 85433 424 7

Distributed in North America by Balogh International Inc.

Printed in Great Britain by Stanley L. Hunt (Printers) Ltd, Rushden, Northamptonshire.

June 2019: NICE has made new recommendations on psychological therapy for treatment of depression in children and young people. Recommendations and evidence in chapter 6 have been replaced.

See www.nice.org.uk/guidance/ng134 for all the current recommendations.

March 2015: NICE updated and added to recommendations on psychological therapies and antidepressants.

Recommendations and evidence in chapter 7 have been replaced.

Areas redacted in this 2005 full guideline indicate areas that have been replaced by the 2015 or 2019 updates.

developed by National Collaborating Centre for Mental Health
Royal College of Psychiatrists' Research and Training Unit
4th Floor
Standon House, 21 Mansell Street
London
E1 8AA

commissioned by National Insitute for Health and Clinical Excellence
MidCity Place
London
WC1V 6NA
www.nice.org.uk

published by The British Psychological Society
St Andrews House
48 Princess Road East
Leicester
LE1 7DR
www.bps.org.uk
and
The Royal College of Psychiatrists
17 Belgrave Square
London
SW1X 8PG
www.rcpych.ac.uk

The British Psychological Society

Royal College of **Psychiatrists**

Contents

Guideline Development Group Membership

Mr Peter Attwood
Social Worker and Family Therapist,
Section Manager, Lewisham Child and
Adolescent Mental Health Service,
South London & Maudsley NHS Trust

Mr Peter Blackman
Chief Executive Officer, The Afiya Trust, Service User Representative

Ms Ellen Boddington
Research Assistant, The National Collaborating Centre for Mental Health

Dr Dick Churchill
General Practioner & Senior Lecturer in Primary Care, University of Nottingham

Ms Michelle Clark
Project Manager (2003), The National Collaborating Centre for Mental Health

Dr Andrew Cotgrove
Clinical Director & Consultant in Adolescent Psychiatry,
Pine Lodge Young People's Centre, Chester

Professor David Cottrell
Professor of Child and Adolescent Psychiatry, University of Leeds

Ms Charlotte Dodds
Depression Support Group Co-Facilitator, Self-help Service, Big Life Company,
Mother/Carer of Depressed Child

Mr Ricky Emanuel
Consultant Child and Adolescent Psychotherapist, Royal Free Hospital, London,
Clinical Lead, Camden Child and Adolescent Mental Health Service

Professor Peter Fonagy
Freud Memorial Professor of Psychoanalysis,
Chief Executive, The Anna Freud Centre Chair, Guideline Development Group

Dr Peter Fuggle
Consultant Clinical Psychologist, Chair, Faculty for Children and Young People,
Division of Clinical Psychology, British Psychological Society, Child and Adolescent
Mental Health Services Manager, Islington Primary Care Trust

Professor Ian Goodyer
Professor of Child and Adolescent Psychiatry, University of Cambridge

The Late Professor Richard Harrington
Professor of Child and Adolescent Psychiatry, Royal Manchester Children's Hospital

Ms Alison Hunter
Project Manager (2004), The National Collaborating Centre for Mental Health

Mr Christopher Jones
Health Economist, The National Collaborating Centre for Mental Health

Dr Tim Kendall
Co-Director, The National Collaborating Centre for Mental Health, Deputy Director, Royal College of Psychiatrists' Research Unit, Medical Director and Consultant Psychiatrist, Sheffield Care Trust, Facilitator, Guideline Development Group

Ms Rebecca King
Project Manager (2004–2005), The National Collaborating Centre for Mental Health

Mrs Sharon Leighton
Nurse Consultant in Child & Adolescent Mental Health, South Staffordshire Healthcare NHS Trust

Ms Catherine Lowenhoff
Nurse Consultant, North Essex Mental Health Partnership NHS Trust

Ms Amelia Mustapha
Fundraising, Marketing and Communications Manager, Depression Alliance
Service User Representative

Dr Mary Target
Psychoanalyst and Clinical Psychologist, Reader in Psychoanalysis, University College London, Professional Director, The Anna Freud Centre, London

Dr Clare Taylor
Editor, The National Collaborating Centre for Mental Health

Dr Craig Whittington
Senior Systematic Reviewer, The National Collaborating Centre for Mental Health

Ms Heather Wilder
Information Scientist, The National Collaborating Centre for Mental Health

Acknowledgements

The Depression in Children Guideline Development Group and the National Collaborating Centre for Mental Health review team would like to thank the following people:

Those who acted as advisers on specialist topics:

Dr Peter Appleton, Bedfordshire and Luton Community NHS Trust
Ms Leezah Hertzmann, Mental Health Advisor to Department for Education & Skills
Dr Bob Jezzard, Senior Policy Adviser, Department of Health
Dr Kwame McKenzie, Royal Free & University College London School of Medicine, London
Ms Carol Paton, Oxleas NHS Trust
Dr Judith Trowell, Consultant Child and Adolescent Psychiatrist, Tavistock Clinic.
Professor Ian Weller, Chairman of The Committee on Safety of Medicines Expert Working Group on Selective serotonin reuptake inhibitors in children and young people

The following who allowed the National Collaborating Centre for Mental Health review team access to their data files:

Committee on Safety of Medicines
Medicines and Healthcare Products Regulatory Agency
Dr Judith Trowell, Consultant Child and Adolescent Psychiatrist, Tavistock Clinic.

1 Introduction

This guideline has been developed to advise on the identification and management of depression in children and young people in primary, community and secondary care. The guideline recommendations have been developed by a multidisciplinary team of healthcare professionals, carers, and guideline methodologists after careful consideration of the best available evidence. It is intended that the guidelines will be useful to clinicians and service commissioners in providing and planning high-quality care for children and young people with depression while also emphasising the importance of the experience of care for patients and their families.

1.1 National guidelines

1.1.1 What are clinical practice guidelines?

Clinical practice guidelines are 'systematically developed statements that assist clinicians and patients in making decisions about appropriate treatment for specific conditions' (Department of Health, 1996). They are derived from the best available research evidence, using predetermined and systematic methods to identify and evaluate all the evidence relating to the specific condition in question. Where evidence is lacking, the guidelines will incorporate statements and recommendations based upon the consensus statements developed by the guideline development group (GDG).

Clinical guidelines are intended to improve the process and outcomes of healthcare in a number of different ways. Clinical guidelines can:

- provide up-to-date evidence-based recommendations for the management of conditions and disorders by healthcare professionals
- be used as the basis to set standards to assess the practice of healthcare professionals
- form the basis for education and training of healthcare professionals
- assist patients and carers in making informed decisions about their treatment and care
- improve communication between healthcare professionals, patients and carers
- help identify priority areas for further research.

1.1.2 Uses and limitations of clinical guidelines

Guidelines are not a substitute for professional knowledge and clinical judgment. Guidelines can be limited in their usefulness and applicability by a number of different factors: the availability of high-quality research evidence, the quality of the methodology

used in the development of the guideline, the generalisability of research findings and the uniqueness of individual patients.

Although the quality of research in depression in children and young people is variable, the methodology used here reflects current international understanding on the appropriate practice for guideline development (AGREE: Appraisal of Guidelines for Research and Evaluation Instrument; www.agreecollaboration.org), ensuring the collection and selection of the best research evidence available, and the systematic generation of treatment recommendations applicable to the majority of patients and situations. However, there will always be some patients for whom clinical guideline recommendations are not appropriate and situations in which the recommendations are not readily applicable. This guideline does not, therefore, override the individual responsibility of healthcare professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or carer.

In addition to the clinical evidence, cost-effectiveness information, where available, is taken into account in the generation of statements and recommendations of the clinical guidelines. While national guidelines are concerned with clinical and cost effectiveness, issues of affordability and implementation costs are to be determined by the NHS.

In using guidelines, it is important to remember that the absence of empirical evidence for the effectiveness of a particular intervention is not the same as evidence for ineffectiveness. In addition, of particular relevance in mental health, evidence-based interventions are often delivered within the context of an overall treatment programme including a range of activities, the purpose of which may be to help engage the patient, and provide an appropriate context for the delivery of specific interventions. It is important to maintain and enhance the service context in which these interventions are delivered, otherwise the specific benefits of effective interventions will be lost. Indeed, the importance of organising care, so as to support and encourage a good therapeutic relationship, is at times more important than the specific interventions offered.

1.1.3 Why develop national guidelines?

The National Institute for Clinical Excellence (NICE) was established as a Special Health Authority for England and Wales in 1999, with a remit to provide a single source of authoritative and reliable guidance for patients, professionals and the public. NICE guidance aims to improve standards of care, to diminish unacceptable variations in the provision and quality of care across the NHS and to ensure that the health service is patient-centred. All guidance is developed in a transparent and collaborative manner using the best available evidence and involving all relevant stakeholders.

NICE generates guidance in a number of different ways, two of which are relevant here. First, national guidance is produced by the Technology Appraisal Committee to give robust advice about a particular treatment, intervention, procedure or other health technology. Second, NICE commissions the production of national clinical practice guidelines focused upon the overall treatment and management of a specific condition. To enable this latter development, NICE established seven National Collaborating Centres in conjunction with a range of professional organisations involved in healthcare.

1.1.4 The National Collaborating Centre for Mental Health

This guideline has been commissioned by NICE and developed within the National Collaborating Centre for Mental Health (NCCMH). The NCCMH is a collaboration of the professional organisations involved in the field of mental health, national service-user and carer organisations, a number of academic institutions and NICE. The NCCMH is funded by NICE and led by a partnership between the Royal College of Psychiatrists' Research Unit and the British Psychological Society's equivalent unit, the Centre for Outcomes Research and Effectiveness. Members of the NCCMH reference group come from the following organisations:

- British Psychological Society
- Centre for Economics in Mental Health
- Centre for Evidence Based Mental Health
- College of Occupational Therapists, now replaced by the Clinical Effectiveness Forum for the Allied Health Professions
- Institute of Psychiatry
- Manic Depression Fellowship
- Mind
- National Institute for Social Work
- Rethink Severe Mental Illness
- Royal College of General Practitioners
- Royal College of Nursing
- Royal College of Psychiatrists
- Royal Pharmaceutical Society.

The NCCMH reference group provide advice on a full range of issues relating to the development of guidelines, including the membership of experts, professionals, patients and carers within guideline development groups.

1.1.5 From national guidelines to local protocols

Once a national guideline has been published and disseminated, local healthcare groups will be expected to produce a plan and identify resources for implementation, along with appropriate timetables. Subsequently, a multidisciplinary group involving commissioners of health care, primary care and specialist mental health professionals, patients and carers should undertake the translation of the implementation plan into local protocols. The nature and pace of the local plan will reflect local healthcare needs and the nature of existing services; full implementation may take a considerable time, especially where substantial training needs are identified.

1.1.6 Auditing the implementation of guidelines

This guideline identifies key areas of clinical practice and service delivery for local and national audit. Although the generation of audit standards is an important and necessary step in the implementation of this guidance, a more broadly based implementation strategy should be developed. Nevertheless, it should be noted that the Healthcare Commission will monitor the extent to which Primary Care Trusts (PCTs), trusts responsible for mental health and social care and Health Authorities have implemented these guidelines.

1.2 The national Depression in Children and Young People guideline

1.2.1 Who has developed this guideline?

The Guideline Development Group (GDG) was convened by the NCCMH, and supported by funding from NICE. The GDG consisted of carers, professionals from primary care, psychiatry, clinical psychology, nursing, social work services and the voluntary sector.

Staff from the NCCMH provided leadership and support throughout the process of guideline development, undertaking systematic searches, information retrieval, appraisal and systematic review of the evidence. Members of the GDG received training in the process of guideline development. The National Guidelines Support and Research Unit, also established by NICE, provided advice and assistance regarding aspects of the guideline development process.

All members of the Group made formal declarations of interest at the outset, updated at every GDG meeting. GDG members met a total of 20 times throughout the process of guideline development. For ease of evidence identification and analysis, some members of the GDG became topic leads, covering identifiable intervention approaches. The NCCMH technical team supported group members, with additional expert advice from special advisers where necessary. All statements and recommendations in this guideline have been generated and agreed by the whole GDG.

1.2.2 For whom is this guideline intended?

This guideline will be of relevance to children and young people from 5 years until their 18th birthday who have experience of depression. For young adults of 18 years and over, healthcare professionals should follow the NICE clinical guideline number 23, Depression: Management of Depression in Primary and Secondary Care (NICE, 2004). (For information concerning transfer to adult services see section 8.1.8 of this guideline for children and young people.)

The guideline covers the care provided by primary, community, secondary and other healthcare professionals who have direct contact with, and make decisions concerning the care of, children and young people with depression.

The guideline will also be relevant to the work, but will not cover the practice, of those in:

- occupational health services
- social services
- the independent sector.

The experience of depression can affect the whole family and often the community. The guideline recognises the role of both in the treatment and support of children and young people with depression.

1.2.3 Specific aims of this guideline

The guideline makes recommendations and suggests good practice points for the treatment and management of depression in children and young people. Specifically, it aims to:

- Evaluate the role of specific psychological therapies in the treatment and management of depression in children and young people
- Evaluate the role of specific pharmacological treatments in the treatment and management of depression in children and young people
- Address the issues of diagnosis, detection and the use of screening techniques in high-risk situations.
- Provide key review criteria for audit, which will enable objective measurements to be made of the extent and nature of local implementation of this guidance, particularly its impact upon practice and outcomes for children and young people with depression.

The guideline will not cover interventions that are not normally available in the NHS.

1.2.4 The structure of this guideline

The guideline is divided into chapters, each covering a set of related topics. The first two chapters provide an introduction to the guideline and the methods used to develop the guideline. The third chapter provides an introduction to depression in children and young people. Chapters 4 to 8 provide the evidence that underpins the recommendations. The final Chapter provides a summary of the recommendations.

Each evidence chapter and/or sub-section begins with a general introduction to the topic that sets the recommendations in context. Depending on the nature of the evidence, narrative reviews or meta-analyses were conducted. Therefore, the structure of the chapters varies. Where appropriate, information about current practice, the evidence base and any research limitations is provided. Where meta-analyses were conducted, information about the databases searched and the study inclusion criteria is given. This is followed by information about the studies considered for review. Evidence summary tables or narrative reviews are used to present the evidence. Clinical summaries are used to summarise the evidence presented. Finally, recommendations related to each topic are presented at the end of each chapter. On the CD-ROM, full details about the included studies can be found in Appendix Q, R, S and T. Where meta-analyses were conducted, full details about the quality of the evidence and summary statistics can be found in evidence profile tables in Appendix P on CD-ROM. Data from individual studies can be found in forest plots presented in Appendix U and V on CD-ROM (see Text Box 1 for details).

Text Box 1: Evidence summaries and relevant section/appendix

Evidence summaries	Chapter section/Appendix
Evidence summary tables	6.2.7, 6.2.8, 7.4.4, 7.4.5, 7.5.4
Clinical summaries	4.2.9, 5.1.5, 5.2.3, 5.3.5, 6.2.9, 6.3.3, 6.4.5, 7.4.8, 7.5.5, 7.6.5, 7.8.5, 8.2.6
Included/excluded studies tables for family support/parental education	Appendix Q
Included/excluded studies tables for psychological interventions	Appendix R
Included/excluded studies tables for antidepressant drug treatment	Appendix S
Included/excluded studies tables for other drug treatment	Appendix T
Forest plots for psychological interventions	Appendix U
Forest plots for antidepressant drug treatment	Appendix V

2 Methods used to develop this guideline

2.1 Overview

The development of this guideline drew upon methods outlined by NICE (NICE, 2002; Eccles & Mason, 2001). A team of experts, professionals, service user(s) and carer(s), known as the Guideline Development Group (GDG), with support from the NCCMH staff, undertook the development of a patient centred, evidence-based guideline. There are six basic steps in the process of developing a guideline:

- Define the scope, which sets the parameters of the guideline and provides a focus and steer for the development work
- Define clinical questions considered important for practitioners and service users
- Develop criteria for evidence searching and search for evidence
- Design validated protocols for systematic review and apply to evidence recovered by search
- Synthesise and (meta-) analyse data retrieved, guided by the clinical questions, and produce evidence statements
- Answer clinical questions with evidence-based recommendations for clinical practice.

The clinical practice recommendations made by the GDG are therefore derived from the most up-to-date and robust evidence base for the clinical and cost effectiveness of the interventions and services used in the management of depression in children. In addition, to ensure a service user and carer focus, the concerns of service users and carers regarding clinical practice have been highlighted and addressed by good practice points and recommendations agreed by the whole GDG. The evidence-based recommendations and good practice points are the core of this guideline.

2.2 The Guideline Development Group

The GDG consisted of: professionals in psychiatry, clinical psychology, nursing, social work, and general practice; academic experts in psychiatry and psychology; a service user representatives and a carer. The guideline development process was supported by staff from the NCCMH, who undertook the clinical and health economics literature searches, reviewed and presented the evidence to the GDG, managed the process, and contributed to the drafting of the guideline.

2.2.1 Guideline Development Group meetings

Twenty-two GDG meetings were held between February 2003 and April 2005. During each day-long GDG meeting, in a plenary session, clinical questions and clinical evidence were reviewed and assessed, statements developed and recommendations formulated. At each meeting, all GDG members declared any potential conflict of interests, and service user and carer concerns were routinely discussed as part of a standing agenda.

2.2.2 Topic groups

The GDG divided its workload along clinically relevant lines to simplify the guideline development process, and GDG members formed smaller topic groups to undertake guideline work in that area of clinical practice. Topic group 1 covered questions relating to risk factors, screening, detection, self-help, family support and inpatient treatment. Topic group 2 covered pharmacological treatments and relapse prevention, and topic group 3 covered psychological therapies and relapse prevention. In addition, both topic groups 2 and 3 looked at the issue of combining pharmacological and psychological therapies.

The topic groups were designed to efficiently manage the large volume of evidence appraisal prior to presenting it to the GDG as a whole. Each topic group was chaired by a GDG member with expert knowledge of the topic area (one of the healthcare professionals). Topic groups refined the clinical definitions of treatment interventions, reviewed and prepared the evidence with the systematic reviewer before presenting it to the GDG as a whole, and helped the GDG to identify further expertise in the topic. Topic group leaders reported the status of the group's work as part of the standing agenda. They also introduced and led the GDG discussion of the evidence review for that topic and assisted the GDG Chair in drafting that section of the guideline relevant to the work of each topic group.

2.2.3 Service users and carers

Carers with experience of services and service user representatives gave an integral carer/service-user focus to the GDG and the guideline. The GDG included service user representatives and representatives of a national service user group. They contributed as full GDG members to writing the clinical questions, helping to ensure that the evidence addressed their views and preferences, highlighting sensitive issues and terminology associated with depression in children and young people, and bringing service-user research to the attention of the GDG.

2.2.4 Special advisers

Special advisers, who had specific expertise in one or more aspects of treatment and management relevant to the guideline, assisted the GDG, commenting on specific aspects of the developing guideline and making presentations to the GDG (see the acknowledgements for a list of names).

2.2.5 National and international experts

National and international experts in the area under review were identified through the literature search and through the experience of the GDG members. These experts were contacted to recommend unpublished or soon-to-be published studies in order to

ensure up-to-date evidence was included in the development of the guideline (see Appendix D for a list of names).

2.3 Clinical questions

Clinical questions were used to guide the identification and interrogation of the evidence base relevant to the topic of the guideline. The questions were developed using a modified nominal group technique. The process began by asking each member of the GDG to submit as many questions as possible. The questions were then collated and refined by the review team. At a subsequent meeting, the guideline chair facilitated a discussion to further refine the questions. At this point, the GDG members were asked to rate each question for importance. The results of this process were then discussed and consensus reached about which questions would be of primary importance and which would be secondary. The GDG aimed to address all primary questions, while secondary questions would only be covered time permitting. Appendix E lists the clinical questions.

2.4 Systematic clinical literature review

The aim of the clinical literature review was to systematically identify and synthesise relevant evidence from the literature in order to answer the specific clinical questions developed by the GDG. Thus, clinical practice recommendations are evidence-based, where possible, and if evidence was not available, informal consensus methods were used (see section 2.4.6) and the need for future research was specified.

2.4.1 Methodology

A stepwise, hierarchical approach was taken to locating and presenting evidence to the GDG. The NCCMH developed this process based on advice from NICE's National Guidelines Support and Research Unit and after considering recommendations from a range of other sources. These included:

- Centre for Clinical Policy and Practice of the New South Wales Health Department (Australia)
- Clinical Evidence Online
- Cochrane Collaboration
- NHS Centre for Reviews and Dissemination
- New Zealand Guideline Group
- Oxford Centre for Evidence-Based Medicine
- Oxford Systematic Review Development Programme
- Scottish Intercollegiate Guidelines Network
- United States Agency for Health Research and Quality.

2.4.2 The review process

A brief search of the major bibliographic databases for recent systematic reviews and existing guidelines was first conducted to help inform the development of the scope. After the scope was finalised, a more extensive search for systematic reviews was undertaken. At this point, the review team, in conjunction with the GDG, developed an evidence map that detailed all comparisons necessary to answer the clinical questions. The initial approach taken to locating primary-level studies depended on the type of clinical question and availability of evidence.

After consulting the GDG, the review team decided which questions were likely to have a good evidence base and which questions were likely to have little or no directly relevant evidence. For questions in the latter category, a brief descriptive review was initially undertaken by a member of the GDG (see section 2.4.6). For questions with a good evidence base, the review process depended on the type of clinical question.

2.4.2.1 The search process for questions concerning interventions

For questions related to interventions, the initial evidence base was formed from well-conducted randomised controlled trials (RCTs) that addressed at least one of the clinical questions. Although there are a number of difficulties with the use of RCTs in the evaluation of interventions in mental health, the RCT remains the most important method for establishing treatment efficacy. The initial search for RCTs involved searching the standard mental health bibliographic databases (EMBASE, MEDLINE, PsycINFO, Cochrane Library) for all RCTs potentially relevant to the guideline. If the number of citations generated from this search was large (>5000), question-specific search filters were developed to restrict the search while minimising loss of sensitivity.

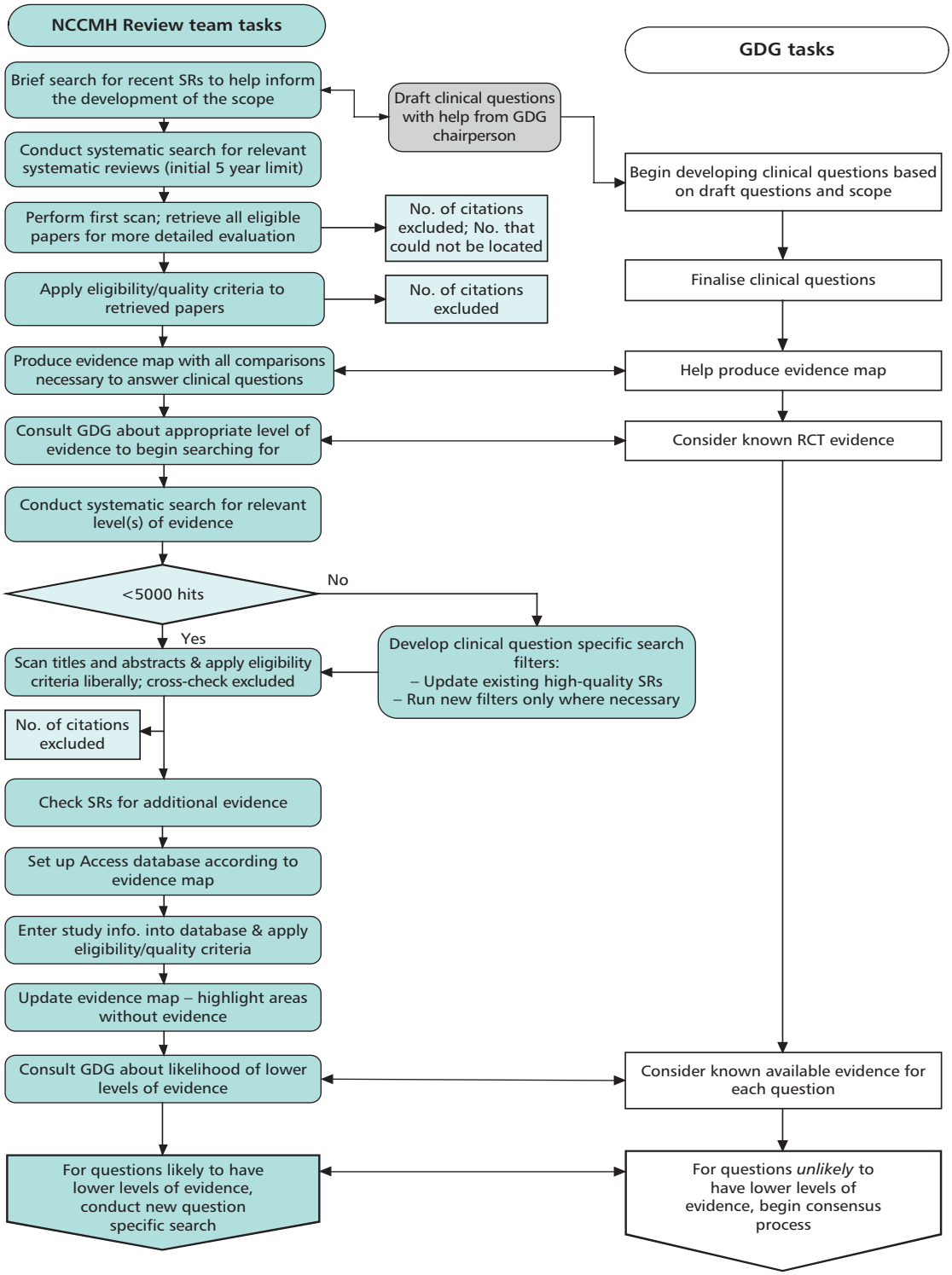
After the initial search results were scanned liberally to exclude irrelevant papers, the review team used a purpose built 'study information' database to manage both the included and the excluded studies (eligibility criteria were developed after consultation with the GDG). For questions without good quality evidence (after the initial search), a decision was made by the GDG about whether to (a) repeat the search using subject-specific databases (for example, CINAHL, AMED, SIGLE or PILOTS), (b) conduct a new search for lower levels of evidence, or (c) adopt a consensus process (see Section 2.4.6). Future guidelines will be able to update and extend the usable evidence base starting from the evidence collected, synthesised and analysed for this guideline.

Recent high-quality English-language systematic reviews were used primarily as a source of RCTs (see Appendix H for quality criteria). However, where existing data sets were available from appropriate reviews, they were cross-checked for accuracy before use. New RCTs meeting inclusion criteria set by the GDG were incorporated into the existing reviews and fresh analyses performed. The review process is illustrated in Flowchart 1.

Additional searches were made of the reference lists of all eligible systematic reviews and RCTs, and the list of evidence submitted by stakeholders. Known experts in the field (see Appendix D), based both on the references identified in early steps and on advice from GDG members, were sent letters requesting systematic reviews or RCTs that were in the process of being published. Unpublished full trial reports were also accepted where sufficient information was provided to judge eligibility and quality. Conference abstracts or poster presentations were not generally acceptable. If data

had not been published in a peer-reviewed journal, the authors were contacted requesting full trial reports. In addition to the searches described above, the tables of contents of appropriate journals were periodically checked for relevant studies.
In addition, the tables of contents of appropriate journals were periodically checked for relevant studies.

Flowchart 1: Guideline Review Process



2.4.2.2 The search process for questions of diagnosis and prognosis

For questions related to diagnosis and prognosis, the search process was the same as described above except that the initial evidence base was formed from studies with the most appropriate and reliable design to answer the particular question. That is, for questions about diagnosis, the initial search was for cross-sectional studies; for questions about prognosis, it was for cohort studies of representative patients. In situations where it was not possible to identify a substantial body of appropriately designed studies that directly addressed each clinical question, a consensus process was adopted (see Section 2.4.6).

2.4.2.3 Search filters

Search filters developed by the review team consisted of a combination of subject heading and free-text phrases. Specific filters were developed for the guideline topic, and where necessary, for each clinical question. In addition, the review team used filters developed for systematic reviews, RCTs and other appropriate research designs (see Appendix H).

2.4.2.4 Study selection

All primary-level studies included after the first scan of citations were acquired in full and re-evaluated for eligibility at the time they were being entered into the study information database. Appendices P-R (on CD-Rom) list the standard inclusion and exclusion criteria. More specific eligibility criteria were developed for each clinical question. Systematic reviews were assessed for eligibility using a standardised form (see Appendix G). All eligible papers were then critically appraised for methodological quality (see Appendix H). The eligibility of each study was confirmed by at least one member of the appropriate topic group.

For some clinical questions, it was necessary to prioritise the evidence with respect to the UK context. To make this process explicit, the topic groups took into account the following factors when assessing the evidence:

- Participant factors (for example, gender, age, ethnicity)
- Provider factors (for example, model fidelity, the conditions under which the intervention was performed, the availability of experienced staff to undertake the procedure)
- Cultural factors (for example, differences in standard care, differences in the welfare system).

It was the responsibility of each topic group to decide which prioritisation factors were relevant to each clinical question in light of the UK context, and then decide how they should modify their recommendations.

2.4.3 Synthesising the evidence

Where possible, outcome data were extracted directly from all eligible studies, which met the quality criteria, into Review Manager 4.2 (Cochrane Collaboration, 2003). Meta-analysis was then used, where appropriate, to synthesise the evidence using Review Manager. If necessary, reanalyses of the data or sensitivity analyses were used to answer clinical questions not addressed in the original studies or reviews. For continuous outcomes, where more than 50% of the total number randomised

in a particular study were not accounted for, the data were excluded from the analysis because of the risk of bias. In the case of dichotomous outcomes (except for the outcome of leaving the study early), the effects of high attrition rates were examined with sensitivity analyses.

Included and excluded studies tables, generated automatically from the study information database, were used to summarise general information about each study (see Appendices P–R on CD-ROM). Where meta-analysis was not appropriate and/or possible, the reported results from each primary-level study were presented in the appropriate included studies table.

Consultation was used to overcome difficulties with coding. Data from studies included in existing systematic reviews were extracted independently by one reviewer directly into Review Manager and cross-checked with the existing data set. Two independent reviewers extracted data from new studies, and disagreements were resolved with discussion. Where consensus could not be reached, a third reviewer resolved the disagreement. Masked assessment (that is, blind to the journal from which the article comes, the authors, the institution, and the magnitude of the effect) was not used since it is unclear that doing so reduces bias (Jadad *et al*., 1996; Berlin, 1997).

2.4.4 Presenting the data to the GDG

Where possible, the GDG were given a graphical presentation of the results using forest plots generated with the Review Manager software. Each forest plot displayed the effect size and confidence interval (CI) for each study as well as the overall summary statistic. The graphs were organised so that the display of data in the area to the left of the 'line of no effect' indicated a 'favourable' outcome for the intervention in question. Dichotomous outcomes were presented as relative risks (RR) with the associated 95% CI (for an example, see Figure 1). A relative risk (or risk ratio) is the ratio of the treatment event rate to the control event rate. An RR of 1 indicates no difference between intervention and control. In Figure 1, the overall RR of 0.73 indicates that the event rate (that is, non-remission rate) associated with intervention A is about three-quarters of that with the control intervention, or in other words, intervention A reduces non-remission rates by 27%. In addition, the CI around the RR does not cross the 'line of no effect' indicating that this is a statistically significant effect. The CI shows with 95% certainty the range within which the true treatment effect should lie.

Binary outcomes used to measure efficacy were calculated on an intention-to-treat basis (that is, a 'once-randomised-always-analyse' basis). This assumes that those participants

Figure 1: Example of a forest plot displaying dichotomous data

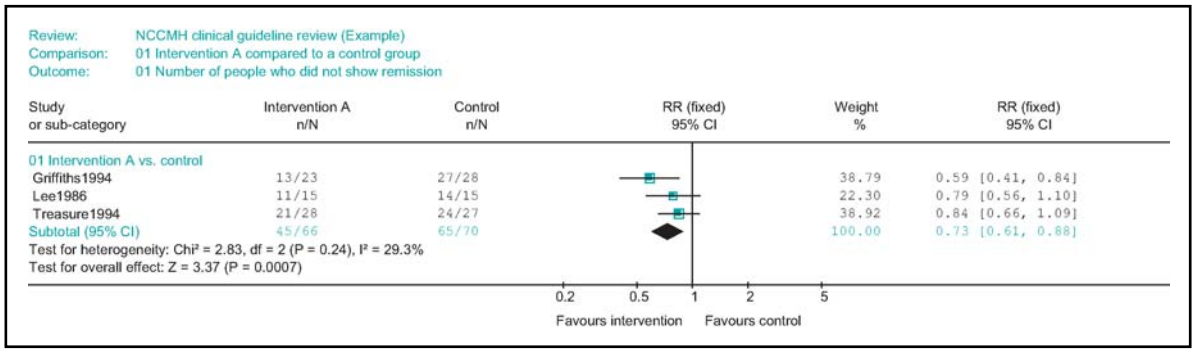
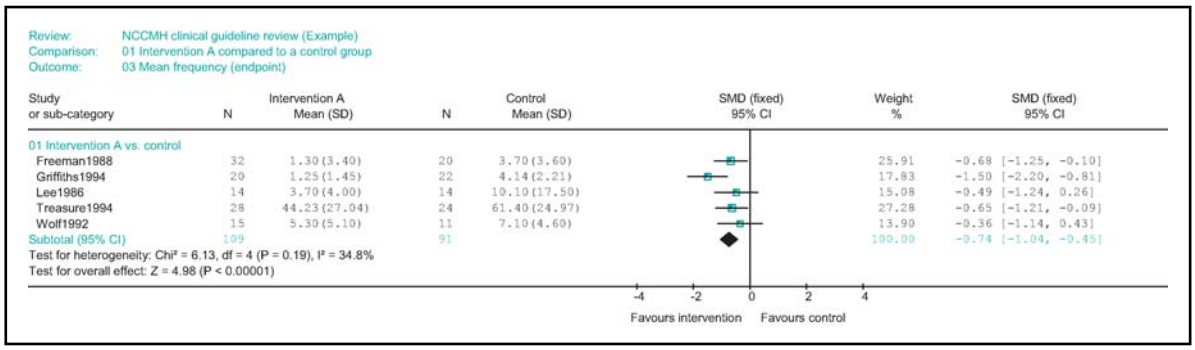


Figure 2: Example of a forest plot displaying continuous data



who ceased to engage in the study – from whatever group – had an unfavourable outcome. For adverse events, we extracted the data as reported by the study authors favouring intention-to-treat where possible.

Continuous outcomes were analysed as weighted mean differences (WMD), or as standardised mean differences (SMD) when different measures were used in different studies to estimate the same underlying effect (for an example, see Figure 2).
If provided, intention-to-treat data, using a method such as 'last observation carried forward', were preferred over data from completers.

To check for heterogeneity between studies, both the I^2 test of heterogeneity and the chi-squared test of heterogeneity ($p < .10$), as well as visual inspection of the forest plots were used. The I^2 statistic describes the proportion of total variation in study estimates that is due to heterogeneity (Higgins & Thompson, 2002). An I^2 of less than 30% was taken to indicate mild heterogeneity and a fixed effects model was used to synthesise the results. An I^2 of more than 50% was taken as notable heterogeneity.
In this case, an attempt was made to explain the variation. If studies with heterogeneous results were found to be comparable, a random effects model was used to summarise the results (DerSimonian & Laird, 1986). In the random effects analysis, heterogeneity is accounted for both in the width of CIs and in the estimate of the treatment effect. With decreasing heterogeneity the random effects approach moves asymptotically towards a fixed effects model. An I^2 of 30 to 50% was taken to indicate moderate heterogeneity.
In this case, both the chi-squared test of heterogeneity and a visual inspection of the forest plot were used to decide between a fixed and random effects model.

To explore the possibility that the results entered into each meta-analysis suffered from publication bias, data from included studies were entered, where there was sufficient data, into a funnel plot. Asymmetry of the plot was taken to indicate possible publication bias and investigated further.

2.4.5 Forming and grading the statements and recommendations

The evidence tables, forest plots, and included studies tables formed the basis for developing clinical statements and recommendations.

2.4.5.1 Intervention studies

Each clinical evidence statement was classified according to a hierarchy.
Recommendations were then graded A to C based on the level of associated evidence or designated as a good practice point (GPP) (see Text Box 2).

Text Box 2: Hierarchy of evidence and recommendations grading scheme

Level	Type of evidence	Grade	Evidence
I	Evidence obtained from a single randomised controlled trial or a meta-analysis of randomised controlled trials	**A**	At least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence level I) without extrapolation
IIa	Evidence obtained from at least one well-designed controlled study without randomisation	**B**	Well-conducted clinical studies but no randomised clinical trials on the topic of recommendation (evidence levels II or III); or extrapolated from level I evidence
IIb	Evidence obtained from at least one other well-designed quasi-experimental study		
III	Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies		
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities	**C**	Expert committee reports or opinions and/or clinical experiences of respected authorities (evidence level IV) or extrapolated from level I or II evidence. This grading indicates that directly applicable clinical studies of good quality are absent or not readily available
		GPP	Recommended good practice based on the clinical experience of the Guideline Development Group

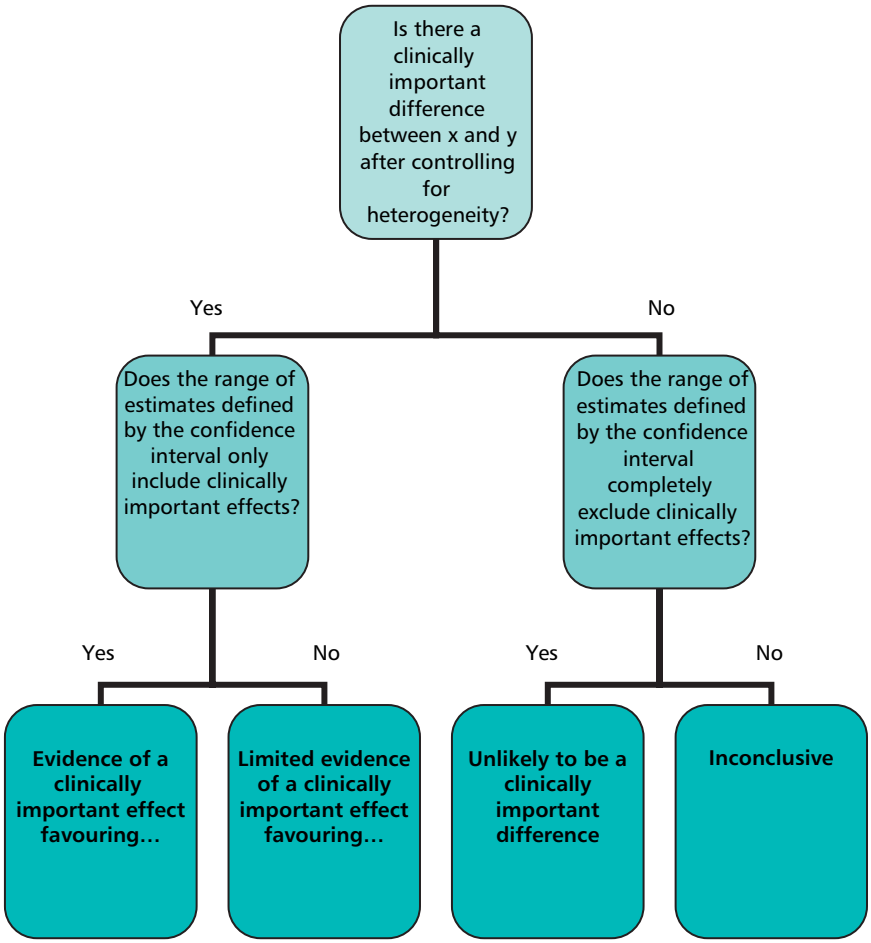
Adapted from Eccles, M. & Mason, J. (2001) How to develop cost-conscious guidelines. *Health Technology Assessment* 5; NHS Executive (1996) *Clinical Guidelines: Using Clinical Guidelines to Improve Patient Care Within the NHS*. London: Department of Health.

In order to facilitate consistency in the interpretation of outcomes, the GDG utilised an algorithm (see Flowchart 2) and evidence profile tables (Appendix P on CD-ROM). The tables summarise information about the quality of each outcome and the findings. Efficacy outcomes were reported as RR/SMD and as the probability of superiority [Area Under the Curve (AUC)]. The AUC represents the probability that a randomly selected participant in the treatment group has a better result than one in the comparison group. The following values were used to help judge the magnitude of the effect: 56% = a smaller than typical effect; 64% = typical effect; 71% = larger than typical effect; ≥76% = much larger than typical effect. Adverse events were reported as SMD or the Number Needed to Treat – Benefit/Harm (NNTB/H). The NNT was interpreted cautiously where baseline risks varied between studies. In addition, NNTs calculated at follow-up were only reported where the length of follow-up was similar across studies. When the length of follow-up or baseline risk varies (especially with low risk), the NNT is a poor summary of the treatment effect (Deeks, 2002).

As shown in Flowchart 2, the GDG classified the results from each outcome as clinically important or not (that is, whether or not the treatment is likely to benefit service users), taking into account both the comparison group and the type of outcome. The threshold for clinical importance is described in each evidence profile table.

Where heterogeneity between studies was judged problematic, in the first instance an attempt was made to explain the cause of the heterogeneity (for example, outliers were

Flowchart 2: Algorithm for determining the clinical importance of an effect



removed from the analysis or sub-analyses were conducted to examine the possibility of moderators). Where homogeneity could not be achieved, a random effects model was used.

In cases where the point estimate of the effect was judged clinically important, a further consideration was made about the precision of the evidence by examining the range of estimates defined by the CI. Where the effect size was judged clinically important for the full range of plausible estimates, the result was described as *evidence of a clinically important effect*. In situations where the point estimate was clinically important but the CI included clinically unimportant effects, the result was described as *limited evidence of clinically important effect*.

Where the point estimate was judged as *not* clinically important and the CI did not include any clinically important effects, the result was described as evidence that there was *unlikely to be a clinically important difference*. Alternatively, if the range of estimates defined by the CI included clinically important benefits as well as no effect or harmful effects, the result was described as *inconclusive*.

Once the evidence profiles were finalised and agreed by the GDG, the associated recommendations were produced and graded. Grading allowed the GDG to distinguish between the level of evidence and the strength of the associated recommendation. In cases where there was methodologically sound (level I) evidence about an area of practice that had little direct clinical relevance to people with depression in England and Wales, the GDG extrapolated from the available evidence based on their combined clinical experience. The resulting recommendations were then graded with a lower grade (for example, a 'B' grade where data were based upon level I evidence).

This allowed the GDG to moderate recommendations based on factors other than the strength of evidence. Such considerations include the applicability of the evidence to the people in question, economic considerations, values of the development group and society, or the group's awareness of practical issues (Eccles *et al*., 1998).

2.4.6 Method used to answer a clinical question in the absence of appropriately designed, high-quality research

In the absence of level I evidence (or a level that is appropriate to the question), or where the GDG were of the opinion (on the basis of previous searches or their knowledge of the literature) that there were unlikely to be such evidence, either an informal or formal consensus process was adopted. This process focused on those questions that the GDG considered a priority.

2.4.6.1 Informal consensus

The starting point for this process of informal consensus was that a member of the topic group identified, with help from the systematic reviewer, a narrative review that most directly addressed the clinical question. Where this was not possible, a brief review of the recent literature was initiated.

This existing narrative review or new review was used as a basis for beginning an iterative process to identify lower levels of evidence relevant to the clinical question and to lead to written statements for the guideline. The process involved a number of steps:

- A description of what is known about the issues concerning the clinical question was written by one of the topic group members
- Evidence from the existing review or new review was then presented in narrative form to the GDG and further comments were sought about the evidence and its perceived relevance to the clinical question
- Based on the feedback from the GDG, additional information was sought and added to the information collected. This may include studies that did not directly address the clinical question but were thought to contain relevant data
- If, during the course of preparing the report, a significant body of primary-level studies (of appropriate design to answer the question) were identified, a full systematic review was done
- At this time, subject possibly to further reviews of the evidence, a series of statements that directly addressed the clinical question were developed
- Following this, on occasion and as deemed appropriate by the development group, the report was then sent to appointed experts outside of the GDG for peer review and comment. The information from this process was then fed back to the GDG for further discussion of the statements
- Recommendations were then developed and could also be sent for further external peer review
- After this final stage of comment, the statements and recommendations were again reviewed and agreed upon by the GDG.

2.5 Health economics review

The number of references identified and the number that met the eligibility criteria are provided in Appendix M.

2.6 Stakeholder contributions

Professionals, service users, and companies have contributed to and commented on the guideline at key stages in its development. Stakeholders for this guideline include:

- Service user/carer stakeholders: the national service user and carer organisations that represent people whose care is described in this guideline
- Professional stakeholders: the national organisations that represent healthcare professionals who are providing services to service users
- Commercial stakeholders: the companies that manufacture medicines used in the treatment of depression
- Primary Care Trusts
- Department of Health and Welsh Assembly Government.

Stakeholders have been involved in the guideline's development at the following points:

- Commenting on the initial scope of the guideline and attending a briefing meeting held by NICE
- Contributing lists of evidence to the GDG
- Commenting on the first and second drafts of the guideline.

2.7 Validation of this guideline

This guideline has been validated through two consultation exercises. The first consultation draft was submitted to the NICE Guidelines Review Panel, and circulated to stakeholders and other reviewers nominated by GDG members.

The GDG reviewed comments from stakeholders, the NICE Guidelines Review Panel, a number of health authority and trust representatives and a wide range of national and international experts from the first round of consultation. The GDG then responded to all comments and prepared a final consultation draft which was submitted to NICE, circulated to all stakeholders for final comments and posted on the NICE website for public consultation. The final draft was then submitted to the NICE Guidelines Review Panel for review prior to publication.

3 Depression

This guideline is concerned with the identification, treatment and management of depression in children and young people (from 5 to their 18th birthday in primary, community and secondary care. This guidance only relates to those conditions identified by the tenth edition of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10) (World Health Organization, 1992), namely, depressive episode (F32), recurrent depressive episode (F33), although some recommendations will also apply to dysthymia (F34.1). Much of this guideline is drawn from research that has utilised a similar, but not identical, classificatory system – the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (DSM-IV) (APA, 1994). Other related NICE guidelines include depression in adults and older adults (NICE, 2004), and bipolar disorder in children, young people and adults (NICE, forthcoming 2006).

3.1 The disorder

3.1.1 Symptoms, presentation and pattern of illness

Depression is a term in common use in the English language and as such has a range of different meanings. The term refers to an overall lowering of normal functions and not specifically to any one component of mind (Thompson, 1995). Descriptive models of depressive states have been consistent for over 2,000 years in noting the same constellation of signs and symptoms in depressed individuals across the lifespan (Jackson, 1986).

Clinically, the term depression refers to a group of symptoms and behaviours clustered around three core alterations in experience: changes in mood, in thinking and in activity, sufficient to cause impairment in personal and/or social functioning. Mood changes typically include sadness and/or irritability accompanied by a loss of pleasure, even in cherished interests. Cognitive changes generally lead to inefficient thinking, usually with a pronounced self-critical focus. Physically, depressed people become less active, although this may be concealed by the presence of anxiety or agitation. Although there are many similarities between adult depression and depression in younger people, there are important developmental differences in each of these three areas (Goodyer & Cooper, 1993).

As with adults, there is a change in mood from pleasant to unpleasant that is relatively pervasive, persisting over time and place and sufficiently severe to interrupt everyday functioning. Some children will deny feeling sad but will admit to feeling 'down', others will admit to feeling 'grumpy' or 'irritable'. In a significant proportion of cases the depressed young person no longer derives as much pleasure from life (anhedonia). This feature occurs in around 15 to 20% of depressed adolescent females (Goodyer & Cooper, 1993).

Typically young depressed patients have poor self-esteem with little to say when asked about their good points. They may indicate that they are 'no good', and that life events

and difficulties in their social world are their fault. They may see no future for themselves, consider life hopeless and themselves helpless to effect any change for the better. They may complain of a loss of concentration, poor attention and an inability to make decisions. This may be due to a loss of confidence in their abilities or a difficulty in thinking. In severe cases the patient may feel guilty, or even wicked, and state that they deserve to be punished for past misdemeanours. Some such cases will have suicidal ideas, which are particularly serious. It should be noted that it is normal for children and young people to feel guilty about parental separation. Very rarely young patients will describe delusions or hallucinations.

Physical changes include low energy, apathy, tiredness and poor motivation. Failure to complete tasks may make feelings of guilt and lack of confidence worse. Appetite may increase or decrease (resulting in weight gain or loss), sleep rhythms are often disrupted (resulting in insomnia at night or hypersomnia during the day) and activity levels are lower overall. Some young people present with a classical 'endogenous illness', very similar to adults, with high levels of anhedonia, prominent physical symptoms of early morning wakening, poor appetite, low sexual drive, physical retardation and low emotional responsiveness. At present there is no evidence that in young people this form of presentation has any special significance other than a markedly severe depressive illness (Goodyer, 1996).

In primary care settings around 2 to 10% of children at any one time complain of aches and pains such as headaches and stomach aches, limb pain, and somewhat less frequently tiredness or fatigue (Campo *et al*., 2004). An unknown proportion of these will have a depressive illness. There appear to be significant gender differences in presentation of somatic symptoms related to depression. For example, it has been suggested that females but not males presenting with headache of unknown origin may have a concurrent depressive illness; whereas, in contrast, musculo-skeletal presentations of unknown origin may reflect a depressive disorder for either sex (Egger *et al*., 1998; Egger *et al*., 1999).

For some depressed children and adolescents the presenting features may be behavioural consequences of their internal mental state. Self-harm, disinterest in general appearance, withdrawal and loss of interest may all reflect an emerging or current depressive disorder. This is increasingly likely if these behavioural features cluster together in time. Other more non-specific behaviours that should evoke concern for an abnormality in mental state include promiscuity, sudden unexplained and persistent levels of irritability and aggression and deterioration in school work for no apparent reason. The latter set of behavioural changes is not indicative of a depressive disorder but should encourage those working with children to consider this possibility.

There is no clear-cut consistency in how depressed children and young people present to healthcare services. Thus, the clinical picture varies in ways that are poorly understood, with levels of severity, personal impairment and developmental age. For example, cognitive features of worthlessness, self-criticism and poor attention increase in adolescence; and somatic features, such as aches and pains, tend to be more prominent in children (Ryan *et al*., 1987; Goodyer & Cooper, 1993; Kolvin & Sadowski, 2001; Luby *et al*., 2003). However, these are tendencies: young children are capable of negative cognitions and adolescents report aches and pains.

There is little doubt that primary care physicians see individuals of all ages with distressing and dysfunctional mental states that are not well articulated in the psychiatric nosology and are often not a major consideration to mental health specialists (Pincus *et al*., 1999). Epidemiological findings in childhood and adolescence have also shown that a significant number of young people between the ages of 6–18 years have modest symptoms, no diagnosis, but with overt psychosocial impairment that may warrant treatment (Costello *et al*., 1996). The natural history of these sub-threshold conditions remains a matter for further research ideally in longitudinal designs such that the temporal relationship between impairments and clinical status can be examined as an evolving rather than static process. What little has been done to date suggests that, from the public health perspective, it would be unwise to ignore sub-threshold depressions if they present with psychosocial impairment (Costello *et al*., 1999). The evidence is that such young people are adding to the general burden of affective morbidity in the community at large, and may continue to do so over time. Whether there are specific and particular continuities and discontinuities in signs and symptoms between sub-threshold conditions and clinical disorders over the life course is not known. Equally it would be sensible to exert a level of clinical concern in those with high levels of depressive signs and symptoms that are just below threshold for diagnosis (called 'minor depression' in DSM-IV but not formally classified in ICD-10). Young people with sub-threshold symptoms (regardless of level of impairment) appear more likely to convert to full depression in the short term than the general population.

3.1.2 Course and prognosis

Around 10% of children and young people with depression recover spontaneously within 3 months. A further 40% recover within the first year. At 12 months 50% remain clinically depressed. By 24 months this figure is around 20 to 30% (Harrington & Dubicka, 2001; Goodyer *et al*., 2003). The influence of treatment on the course of the disorder is not fully known; but clinically, treatment appears to shorten the liability for duration longer than 12 months.

The most serious complication is suicide (a risk of about 3% over the next 10 years) (Harrington, 2001). Suicide prevention and treatment intervention programmes, while necessary and important, may not effectively treat depression in such patients and specific treatments for affective disorder will be required (Harrington *et al*., 1998). Other complications include declining school performance and chronic difficulties with making and retaining friendships.

Persistent depressions in young people appear to have a permanent effect upon personal function and personality, and some have suggested that persistent depressions in the young may lead to chemical and physiological 'scars' indicating persistently altered brain functions, although this has yet to be systematically demonstrated (Post, 1992; Sokolov & Kutcher, 2001). Nevertheless, it is clear that with each successive depressive episode the potency of psychosocial factors necessary to trigger a new depressive episode decreases (Kendler *et al*., 2000; Kendler *et al*., 2001), suggesting that repeated depressions do in fact increase a person's vulnerability to become depressed.

Around 30% of cases have recurrences within 5 years and many of these develop episodes into adult life (Fombonne *et al*., 2001a & b). In the longer term, those children and young people who develop a recurrent or chronic disorder extending into adulthood

are likely to suffer considerable disability and impairment. Depression affects the whole of a person's life, impairing occupational, social, emotional and physical health, and carrying considerable stigma [see the adult depression guideline (NICE, 2004), section 2.1.3]. However, most children and young people who develop a depressive episode and present to clinical services do not go on to suffer a recurrent depressive illness in adult life, although the long-term impact of treatment on prognosis remains unknown.

3.2 Prevalence

The 12-month period prevalence estimates for depression are approximately 1% for pre-pubertal children and around 3% for post-pubertal adolescents (Angold & Costello, 2001). In pre-pubertal children, there is no sex difference in prevalence, whereas in post-pubertal adolescents the prevalence in females may be higher than that of males, whose prevalence continues to rise but at a much slower rate.

In the national survey of child and adolescent mental health (Meltzer *et al*., 2000), 10% of 5–15 year olds had a mental disorder including 4% with emotional disorder (anxiety and depression) and 0.9% with depression. Children and young people with emotional disorders, when compared with those without a mental disorder, were nearly twice as likely to be living with a lone parent (28% versus 15%), more than twice as likely to be with both parents being unemployed (27% versus 12%), and more likely to have parents who were on low incomes, had fewer qualifications and living in social sector housing. Moreover, 50% of children and young people with emotional disorder had a parent with a General Health Questionnaire (GHQ-12) score of 3 or more (twice the proportion of those without a mental disorder) and 34% with a parent scoring 6 or more (more than 3 times the proportion for those without a mental disorder). Importantly, for both conduct disorder and emotional disorder, but not attention deficit hyperactivity disorder (ADHD) or other mental disorders, the higher the parents GHQ-12 score, the greater the prevalence of these disorders in their children.

Depression in children and young people tends to occur in conjunction with other mental health problems; indeed, most fulfil the diagnostic criteria for a second disorder (see 3.3.1). Moreover, looked-after children and young people, and those in correctional institutions, have a particularly high prevalence of all mental disorders, including depression (Meltzer *et al*., 2003b). However, depression is more commonly encountered in a number of particular settings and groups of individuals, including and especially the following:

- School refusal (more associated with depression in adolescent girls than boys)
- Onset of behavioural difficulties in young people, following a disciplinary crisis
- Children or young people who have been maltreated or experienced very traumatic events such as rape
- Children or young people who repeatedly harm themselves
- Young people engaged in chronic family disputes
- Young people with persistent drug and alcohol problems.

Risk factors for depression and the potential for screening is addressed in Chapter 4.

3.3 Diagnosis

Depression is a particularly heterogeneous diagnostic category with changing boundaries and methods of classification. However, the introduction of operational diagnostic criteria has at least improved the reliability of diagnosis, although there has been no parallel improvement in diagnostic validity (Dohrenwend, 1990). Nevertheless, the distinction between mild, moderate and severe depression, as described and defined in ICD-10 (World Health Organization, 1992), has clinical validity, and comparable systems have been employed for much of the research underlying this guideline. This approach has, therefore, been used to structure this guideline.

The diagnosis of mild depression (ICD-10: Depressive episode – mild) is made when depressed mood (or irritability), with either anhedonia or tiredness, is experienced in conjunction with two further symptoms from a list of nine commonly associated with depression (i.e. a total of four symptoms). The mood change must last throughout the waking hours (although some may improve gradually through the day, only to return to feeling depressed on waking), and both the mood change and concurrent symptoms must persist for at least 2 weeks. For moderate depression the number of symptoms rises to 5 or 6 (including depressed mood), and for severe the number rises to 7 or more.

There are no requirements for a particular pattern of cognitions and/or physical symptoms. Equally, no distinction is made regarding the duration of symptoms, which, providing they have been present for at least 2 weeks, may vary in length for any period of time, even years. In cases with duration greater than 52 weeks the diagnosis of dysthymia must be considered (but see 3.3.1.1). In adolescents depression may occur against a childhood history of dysthymia (Kovacs *et al.*, 1994). It is important to reiterate that for children and young people, the clinical characteristics vary somewhat according to age at presentation. Children have a higher rate of physical complaints than adolescents including headaches and abdominal pains and tend not to look depressed. Adolescents are more likely than children to complain of subjective feelings of low mood, and to have a higher rate of suicidal thoughts and self-blame.

3.3.1 Differential diagnosis and comorbidity

Depressive illness should only be diagnosed when the signs and symptoms lead to significant personal suffering and are accompanied by observable social impairment, although in mild depressions social impairment may be less obvious to the observer. The diagnosis requires clinical skills and time to elicit. Depressed young people will not describe their symptoms readily or easily, even to their parents. Although adolescents can be moody and unpredictable these do not constitute clinical characteristics of depression. Similarly tearfulness is of itself not a clinical characteristic of depression, particularly in younger children.

In specialist services and community studies depression seldom occurs as a single psychiatric disorder (Mitchell *et al*., 1988; Goodyer & Cooper, 1993; Herbert *et al*., 1996). Concurrent symptoms of anxiety and behavioural disturbances are present in almost all cases, and between 50 and 80% of depressed cases will also meet criteria for another non-depressive disorder. Conduct disorder and/or oppositional disorder occur in around 25% of young people with depression, with a similar proportion meeting criteria for separation anxiety disorder. Around 15% will meet criteria for obsessive-compulsive disorder, and a further 5% will be concurrently suffering from an eating disorder,

other anxiety states or ADHD. Although the precise association between obesity and depression in children and young people remains to be clarified, it is likely that there is at least some degree of comorbidity. There is no known association with being mildly overweight and depression.

Although there is, as yet, no systematic evidence for an association between concurrent substance misuse and depression in young people, it is widely believed that many young people with depression turn to drugs in an attempt to alleviate persistent low mood. However, there is evidence to suggest that smoking in teenage boys is associated with an increased risk of comorbid substance misuse and psychopathology (including depression) in general (Boys *et al*., 2003; Meltzer *et al*., 2003a).

It is clear that depression in children and young people usually occurs in the context of other detectable problems or comorbidity. However, clinically it is important to avoid counting the same symptoms more than once. Thus, a double diagnosis should only be made when the signs and symptoms indicate the presence of two quite clear and separate psychiatric disorders, occurring at the same time. Very few cases have more than two comorbid diagnoses, and when they do occur they usually indicate severe psychiatric disorder.

3.3.1.1 Dysthymia

Dysthymia has been described as a chronic mood disturbance of young people characterised by: long-standing gloom and dysphoria, brooding about feeling unloved and affective dysregulation. The dominant negative cognition is self-deprecation or negative self-esteem. There are high rates of irritability and anger in everyday circumstances, occurring as a hyperemotional response to social problems in the everyday environment (Kovacs *et al.,* 1994). According to DSM-IV, dysthymia is a chronic depressive condition that in childhood or adolescence presents with the same general characteristic of lowered mood (dysphoria or irritability) as depression, but of insufficient severity to gain the full diagnosis. The symptoms must have been present for at least 1 year or more. ICD-10 requires that symptoms be present for 2 years or more and defines the disorder as likely to begin in late teens or early adult life and makes no reference to a childhood onset form. In addition to depressed mood the subject must have two out of a further six symptoms from the symptoms list for unipolar depression, except that feelings of guilt and suicidal behaviour are not included. The implication is that the latter two symptoms are not found in dysthymic disorders and if present suggest that the patient is likely to be suffering from an episode of depression.

The best clinical description of dysthymia comes from the work of Kovacs and colleagues based on children referred to mental health services in Pittsburgh, USA. Compared with depression, dysthymia is distinguished by the virtual absence and significantly lower prevalence of anhedonia and social withdrawal; and comparatively lower levels of guilt, morbid preoccupation and impaired concentration. Practically none of the dysthymic children had reduced appetite and few had hyposomnia or fatigue (Kovacs *et al*., 1994).

In diagnosing dysthymia, it is important to establish that the patient does not fulfil criteria for current depression. If depression has preceded the onset of dysthymia then there must have been full remission of all depressive symptoms for at least 2 months before the development of dysthymia. By contrast, episodes of depression can be superimposed on dysthymia, in which circumstances both diagnoses can be given.

In the absence of a published evidence base for the treatment of dysthymia at present, in this guideline the treatment of dysthymia, if clinically necessary, should follow that for mild depression.

3.4 Aetiology

More than 95% of major depressive episodes in young people arise in children and young people with long-standing psychosocial difficulties, such as family or marital disharmony, divorce and separation, domestic violence, physical and sexual abuse, school difficulties, including bullying, exam failure, social isolation. A very small number of depressive episodes in children and young people will arise in the absence of prior difficulties, and resulting from an acute, very negative life event, usually involving a severe personal assault. Between 50 and 70% of cases are acute, occurring within a few weeks of a precipitating event, such as a breakdown in a personal confiding relationship. In the other 30 to 50%, onsets emerge more slowly against a background of family disharmony and/or friendship problems (Rueter *et al*., 1999; Goodyer *et al*., 2000a).

There are multiple pathways to the onset of depression in adults and there is every reason to believe that the same is true for depressions across the lifespan (Kendler *et al*., 2002). Moreover, there are numerous aetiological theories to account for depression, including genetic, biochemical and endocrine, psychological, social and socioeconomic. None has gained widespread acceptance, although a pragmatic model, integrating the various theories (the 'Stress-Vulnerability' model; Nuechterlein & Dawson, 1984) has broad clinical utility and is widely subscribed to. In this approach, young people (or adults) will, to varying degrees, have a vulnerability to depression rooted in genetic, endocrine and early family factors, for example emotional deprivation or physical abuse. This vulnerability will interact with current social circumstances, such as poverty, social adversity or family discord, with stressful life events acting as the trigger for an episode of depression (Harris, 2000).

Although this model can be used to understand and research depression in children and young people, what counts as a current social factor in the young child may well count as a vulnerability factor for an adolescent. For example, about 30% of the variation in risk for adolescent depressive symptoms is genetic. Genes appear to act through increasing the liability for other 'depressogenic' risks, such as negative temperament, experiencing more negative life events and difficulties, or responding to them with more distress and impairment (Caspi *et al*., 2003b; Kendler *et al*., 2004). On the other hand, genetic factors overall appear somewhat less important in depressive symptoms arising in pre-pubertal children (Rice *et al*., 2002). Whether this is precisely the same for depressive syndromes and for a depressive illness in particular is not clear.

Biochemical theories of depression, such as the monoamine hypothesis, site at least some of the vulnerability to depression within the 'serotonin systems' in the brain (Birmaher & Heydl, 2001). Other monoamines have also been invoked. There is also evidence for a steroid vulnerability to depression (Birmaher & Heydl, 2001). This suggests that high cortisol levels precede the onset of depression and impair brain functions, including those of serotonin (Goodyer *et al*., 2000a). Of particular interest here, it appears that, amongst well adolescents, those whose mothers suffered with postnatal depression had higher circulating levels of cortisol (Halligan *et al*., 2004), raising the possibility that early events have long-term biochemical effects that may increase a young person's vulnerability to depression.

Psychological processes, such as ingrained patterns of thinking, may also increase a young person's vulnerability to depression. For example, the tendency to negative thinking about oneself at times of low mood, and the characteristic of ruminating or perseverating on these negative thoughts, in the presence of psychosocial adversity, are known to increase the risk for a depressive episode (Lyubomirsky & Nolen-Hoeksema, 1995; Kelvin *et al*., 1999; Park *et al*., 2004). Individuals who possess both these cognitive characteristics appear to be particularly vulnerable to becoming depressed (Nolen-Hoeksema, 2000; Spasojevic & Alloy, 2001).

To reiterate, current social difficulties associated with depression in children and young people include marital disharmony, parental depression and other psychiatric disorders, family discord and maltreatment, including physical, sexual and emotional abuse. The most important non-familial factors are breakdown in friendships and substance misuse. Of course, once a child or young person is depressed, these same factors can act to maintain the state of depression. In addition, poor friendships and further negative life events during the course of the disorder are especially associated with longer duration of disorder (Goodyer *et al*., 2001). Although it is unclear as to why about 30% of first depressive episodes in young people persist beyond 18 months (Goodyer *et al*., 2003), strong 'candidate-factors' include chronic friendship difficulties, ongoing family discord and untreated severe symptoms.

In conclusion, acute life events associated with onset of a depressive episode are personal disappointments derived in the main from friendship difficulties in adolescents and family discord in childhood. However, almost any event that carries a high negative and distressing impact has the potential to trigger the onset of depression in vulnerable young people, with pre-existing chronic family (and/or friendship) difficulties (Goodyer, 2001).

3.5 Use of health service resources and other costs

Morbidity associated with depression in children and young people continues into adulthood in about 30% of cases. This circumstance, with specialist services often required, can be expensive in terms of both emotional and economic cost. Indeed, this disorder often leads to long-term social maladjustment and a higher risk of suicide, with 37.5% continuing to experience social dysfunction into adulthood, coupled with a high risk of criminality, and 32.3% attempting suicide between childhood and adulthood (Fombonne *et al*., 2001b). Given the fact that in 2003 there were 3.6 million children aged 0–5 years, 4 million aged 6–11 years, and 7 million aged 12–18 years (UN Population Division, 2004), these risks affect a large fraction of the national population.

In terms of pharmaceutical costs, there are currently more than 40,000 children and young people using antidepressants in the UK for all mental health disorders (Ramchandani, 2004). These include fluoxetine as well as other selective serotonin reuptake inhibitors (SSRIs) that were permissible prior to December 2003 (Duff, 2003c). These latter medications may be continued or gradually withdrawn or replaced, and it is essential that the alternative costs of these three possibilities be estimated. Using the lowest price ranges for SSRIs, the total healthcare cost of these drugs amounts to at least £12,360,000 per year, including initial prescribing and follow-up consultations (PSSRU, 2003). The societal cost of failing to treat depression at an early stage, however, far outweighs any health service costs to the NHS.

To demonstrate this trade-off, the Maudsley long-term follow-up study of depression in children and young people found a high degree of continuity in psychiatric morbidity persisting into adulthood (Fombonne *et al*., 2001a). Knapp and colleagues (2002) compared long-term cost of depression and comorbid conduct disorder among adults, who as children presented with depression in the Child and Adolescent Psychiatric Department of the Maudsley Hospital between 1970 and 1983. They found that in both groups inpatient hospital cost was the largest component of total cost.

In the case of each child diagnosed with depression or comorbid conduct disorder, the total psychiatric inpatient hospital costs per year were estimated at GBP 193 and GBP 422, respectively (Knapp *et al*., 2002). Those with comorbid conduct disorder utilised more than double the specialist inpatient resources in comparison with those with depression. The problem is that costs range far beyond the childhood years and present a downstream burden that increases with time.

The total cost of depression in children and young people is difficult to measure, as it extends beyond the period of adolescence and can present its largest economic burden in adulthood. However, all estimations show that it is the long-term costs that are ultimately the more important parameters. For instance, depression in adults was estimated to cost the UK £9,000 million each year (Thomas & Morris, 2003). Of this amount, £370 million represents direct treatment costs and the remainder is attributable to indirect costs resulting from 109.7 million working days lost and 2615 deaths due to depression in the year 2000 alone (Thomas & Morris, 2003). Based on these estimates, if 30% of the 14 million children under the age of 18 in the UK remain depressed in adulthood, they will present additional healthcare costs beyond those of treating adult-onset depression and in addition to the social and healthcare costs that were accrued during childhood. Estimates in the US are proportionately the same, given a population that is approximately five times larger than the UK (Greenberg *et al*., 2003). Since depression often starts in and continues beyond childhood with increasing severity in time (Meltzer *et al*., 2000), the economic consequences of this disorder must be evaluated alongside episodes of treatment and parental work disruptions.

The disability-adjusted life year reflects the total amount of healthy life lost from premature mortality or from disability over time. A study by Haby and colleagues (2004) analysed the costs of treating with cognitive behavioural therapy (CBT) the 2.3% of children and young people (6–17 years) who presented with depression in Australia. The study modelled twelve 1 hour sessions of CBT added to two parent sessions and general practioner (GP) diagnosis with referral time. They found that delivery of CBT by a public psychologist costs $9,000 (equivalent to £3,567) per Disability Adjusted Life Year (DALY) saved, and CBT proved to be 23% more efficacious than the control group. Additionally, the same study modelled a 9-month course of SSRI treatment (i.e. 20 mg fluoxetine with 14 doctor visits weekly for the first month, fortnightly for 2 months, and then every remaining month) and found that SSRIs were 16% more efficacious than the control group. While both CBT and SSRIs have lower efficacies in children and young people than in adults (being less cost effective in comparison to adults) the cost effectiveness of less than £5,000 per DALY saved would appear well within the NICE recommended thresholds, particularly in light of the high cost of not treating patients. However, the utilities that underlie the definition of DALYs are not universally accepted, nor does this measure reflect individuals' differential abilities to cope with their functional limitations.

Due to the high prevalence and treatment costs of childhood- and adult-onset depression, and its role as probably the most important risk factor for suicide (Knapp & Ilson, 2002), the costs of antidepressant drug overdose and the disease itself have an important impact on productivity. This circumstance places an enormous economic burden not only on the healthcare system but also on the broader society.

Recently, the World Health Organisation (WHO) has cited the 'undefined burden' of mental health problems in children to highlight the economic and social burden for families, communities, and the wider society. This burden has not been measured due to a dearth of quantitative evidence. In addition, there is a 'hidden burden' that refers to association of depression in children and young people with stigma and violations of human rights (World Health Organization, 2001). The overall economic costs affect, not least the NHS, but also the criminal justice system, social welfare, education and the employment sectors (ibid.). Administrative costs also accrue due to form-filling and any other associated tasks that may be related to prescribing and/or delivering interventions for depression in children and young people.

As debate continues over the efficacy and safety of antidepressants in children and young people and over the usefulness of quality of life estimates in mental health disorders, more research is required into the relationship of age and sex on predispositions to depression in children and young people, and the economic consequences of alternative interventions. Since depression is at least twice as common in adolescent and adult females in comparison with adolescent and adult males (Angold *et al*., 2002), it stands to reason that recommendations for treatment and prevention should be particularly directed at females. This is not to ignore the importance of treating such conditions in males, yet it highlights the fact that a 2–3:1 female to male differential exists in adolescent and adult depression (Angold *et al*., 2002). The acknowledgement of putative gender markers for depression allows for a more synchronised co-ordination between healthcare professionals, their patients, and the policies that guide them.

3.5.1 Human and monetary cost of depression in children and young people

The incidence of depression tends to present itself in childhood from the age of 6 years onwards, at a rate of 0.5 to 0.75% in children aged 6–11 years. This means that 1 in 130 to 1 in 200 children aged 6–11 will experience depression. This figure increases up to eight-fold in the case of children aged 12–18 years, with 2–4% developing symptoms of depression. Stated another way, 1 in 50 to 1 in 25 children aged 12–18 years will experience depression. Including all depression criteria, the incidence rates for the 0–5, 6–11 and 12–18 age ranges are 1, 6 and 9%, respectively. Given that in 2003 there were 3.6 million children aged 0–5 years, 4 million children aged 6–11 years and 7 million children aged 12–18 years (UN Population Division, 2004), the societal cost per year of depression in all these ages amounts to a considerable figure in terms of treatment costs, and an even larger figure in terms of societal costs. Future studies are needed to quantify these values.

More specifically, productivity foregone due to premature deaths and morbidity arising as a consequence of depression in children and young people (preventing parents and affected individuals from working in adulthood) has not been calculated in any study to date. Future studies are needed to compare healthcare costs of depression in children

and young people with lost employment costs by parents, or by sufferers upon reaching adulthood.

Costing data for depression in children and young people are scarce to nonexistent. The few studies that do address this subject fail to meet rigorous criteria for health economic appraisal (Drummond *et al*., 1997). To remedy this situation, there is a need for robust efficacy data and reliable cost estimates for alternative treatments that can be administered during childhood.

There is a pressing need, also, for studies that report treatment costs alongside the costs that accrue over a lifetime as a result of the condition. For example, a child or young person who suffered from depression that prevented them from working in adulthood will on average lose £483.04 for every week they are absent (IDS Report, 2003), as well as opportunities for career advancement. The same can be said if one or both parents losing work as a result of their child's condition. From an economic vantage point, even a single week lost would amount to a significant cost. The challenge is to stratify these costs according to age and treatment modality and to compare these values to the cost of lost employment that accounts for the major societal cost.

3.5.2 Treatment costs

With most SSRIs being available in a generic form, the costs of alternative SSRI treatments are comparable. For example, a 1-year course of fluoxetine (£13.26 in 2003 for 20 mg tablet in generic form) would cost an estimated £216 including initial GP prescribing and follow-up costs.[1] It is believed that patients will require up to 18 months of drug therapy to fully recover and avoid withdrawal symptoms. Therefore, a 1.5-year course of fluoxetine would cost an estimated £309.[2]

Relative to drug interventions, the costs of treatment are known to be higher in the case of CBT. For example, 15 one-hour sessions of CBT delivered by a clinical psychologist costs an estimated £990,[3] or £681 more than the 1.5-year SSRI therapy. Incremental cost effectiveness analyses are needed to estimate the additional benefit achieved at a given additional cost. From a societal perspective, all of the costs need to be weighed against the reduction of work-related absences, which may be much more costly than additional sessions of either of these psychological or pharmacological treatments.

Depression in children and young people may potentially cost the UK health services per annum up to £3.54 million for fluoxetine treatment, £113.45 million for CBT treatment, and £148.88 million for combined CBT and fluoxetine treatments.

Initial results indicate a total national cost due to depression in children and young people of £2,879 million per year, which is comparable to the total cost calculated by Kind and Sorensen (1993) a decade ago as referenced in the NICE adult depression

---

[1]£13.26 per month for the direct drug costs (West Midlands Medicines Information Service, 2003) plus £31 for first prescribing session (PSSRU, 2003), plus £26 for clinical consultations (PSSRU, 2003), including indirect and qualification costs = £216.

[2]Prescribing costs are included in the first year only; thereafter, an average of 1.5 follow-up sessions are offered over 6 months (1.5 × £26 = £309).

[3]£66 (per hour of client contact, PSSRU 2003).

guideline (NICE, 2004). Current wisdom dictates that even if a small fraction of sufferers reach full remission it will be substantially cheaper to treat depressed children than to leave them untreated in adulthood. Efficient service utilisation based upon rigorous health economic evaluations on the cost effectiveness of treating in childhood versus adulthood would reduce the social and economic burden of depression, to ensure optimal care is delivered within the constraints of the national budget.

3.6 Treatment and management in the NHS

As with depression in adults, the provision of interventions for children and young people who get depressed is significantly limited by public stigma, a failure to detect or recognise depression, and the way that services are organised for this group of young people. There is little doubt that children and young people are often unwilling to seek help because of the stigma associated with mental health problems. Moreover, the heterogeneity in the nature, course, comorbidity and outcomes of depression in all age groups is likely to lead to poor recognition, especially by healthcare professionals in schools and community and primary care settings. This is made all the more complicated by the considerable variation in the local organisation of mental health services for children and young people. In any event, studies both in the UK and the USA have estimated that as many as 75% of children and adolescents with a clinically identifiable mood disorder remain undetected in the community. There are therefore many barriers to the availability and delivery of care (Andrews *et al*., 2002; Coyle *et al*., 2003).

Considerations regarding the organisation of services for depressed children and young people, including the use of inpatient facilities, are reviewed in Chapter 8.

3.6.1 Assessment, detection and co-ordination of care

Given that the majority of depressed children and young people do not receive assessment, treatment or care, it is essential that all healthcare professionals involved in the care of children and young people should be able to detect and assess children with depression. They should also be able to determine and recognise those who are at risk of depression. Nowhere is this more important than at tier 1 (including general practitioners) and tier 2. However, it is equally important that all services from tiers 1 to 4 should work as an integrated, seamless service, properly co-ordinated, with higher tiers helping to train lower tiers wherever this is possible and appropriate.

3.6.2 Initial management

Treatment is aimed at the whole child and not a particular pattern of signs and symptoms or a single diagnosis when comorbidity is present. Direct treatment of depressive disorders should always be accompanied by support for the family who will be key in assisting focused treatments for their offspring. As yet we do not have a sound evidence-based protocol for the management of different forms of depression in young people (Park & Goodyer, 2000). A treatment programme therefore has multiple aims: to alleviate depressive disorder, to reduce comorbid conditions, to promote normal social and emotional development and school performance, relieve family distress, and to prevent or reduce the risk of relapse.

The place of family support and social/environmental interventions in the general treatment of children and young people with depression is reviewed in Chapter 5.

3.6.3 Psychological therapies

Many psychological therapies, including self-help, have been considered for the acute treatment of depression in children and young people, although few have been evaluated for relapse prevention. Psychological therapies include cognitive behavioural therapy (CBT) in individual and group formats, interpersonal psychotherapy (IPT), non-directive supportive therapy, psychoanalytic/psychodynamic child psychotherapy, family therapy, relaxation, self-modelling, counselling, guided self-help, art therapy and control enhancement training. However, the evidence base for the majority of these therapies is extremely limited.

The evidence for the use of psychological therapies in the acutely depressed individual, and to prevent relapse, is reviewed in Chapter 6. The possible impact of patient and therapist characteristics upon outcome is also considered.

3.6.4 Pharmacological and physical treatments

The use of pharmaceutical agents in the treatment of depression in children and young people has generally followed their use in adults, although far fewer trials exist. Thus, tricyclic antidepressants, SSRIs and some other atypical antidepressants have been tried as an acute treatment. Antidepressants have also been used to prevent relapse in susceptible young people. Other drug treatments used include lithium. SSRIs have also been combined and compared with psychological therapies.

However, the recent review of the efficacy and safety of antidepressant drugs for depression in children and young people by the Expert Working Group of the Committee on Safety of Medicines (CSM),[4] has led the Medicines and Healthcare products Regulatory Agency[5] (MHRA) to contraindicate the use of most of the SSRIs and venlafaxine in this context. Only fluoxetine has been considered to have a positive balance of risks and benefits. The European Medicines Evaluation Agency (EMEA) has also reviewed the use of SSRIs and SNRIs (selective noradrenlaine reuptake inhibitors) and suggests these drugs should generally not be used in the paediatric age group, except in their approved indications – usually not depression. It suggests that if they are used, patients should be carefully monitored for the appearance of suicidal behaviour, self-harm and hostility and that this is particularly important at the beginning of treatment.

The evidence base for these treatments and the advice given by the MHRA and the EMEA are reviewed in Chapter 7. The use of electro-convulsive therapy (ECT) in depressed children and young people is also considered.

3.7 Black and minority ethnic groups

In the national survey of mental health of children and adolescents (Meltzer *et al.*, 2000), nearly 10% of white children, 12% of black children, 8% of Pakistani and Bangladeshi children and 4% of Indian children were assessed as having a mental health problem. These prevalence figures vary with age and diagnostic category among

[4]www.mca.gov.uk/aboutagency/regframework/csm/csmhome.htm

[5]www.mhra.gov.uk/

different ethnic groups, although differences are not usually large. For example, amongst boys aged 5–10 years, there are relatively small differences in the prevalence of emotional disorder (anxiety and depression). However, amongst 11–15-year-old boys, white, black and Indian adolescents showed very similar prevalence rates (around 5% in each group), whereas Pakistani and Bangladeshi adolescents had a prevalence rate of over 12%. Importantly, especially given the extent of comorbidity amongst young people with depression, black male adolescents are particularly likely to have conduct disorders, with a prevalence rate at over twice that for white adolescent males. However, there is some evidence that there are lower rates of access to mental health services for children and adolescents from ethnic minorities.

Malek and Joughin (2004) have shown a statistically significant bias regarding the referral route to CAMHS and ethnicity of children, resulting in lower referral rates for children and young people from black and minority ethnic groups when compared with their white peers. This may be the result of cultural attitudes to mental health problems amongst some ethnic minorities, leading parents to ignore problems or hide them as a result of shame. But it may also suggest that CAMHS are less responsive to the needs of black and minority ethnic children with any mental health problem including depression.

Language may also present a barrier for some of parents of children of black and minority ethnic groups. Parents' inability to express themselves as plainly in English as in their first language can lead to professionals making a physical rather than psychological diagnosis. Parents' anxiety around navigating the health service and the fear of stigma can lead to them accepting an inaccurate diagnosis. Trans-cultural considerations are also particularly important when assessing and diagnosing people from 'other' cultures. In some societies, the European concept of 'depression' is meaningless. Overlooking this consideration can result in either missed diagnosis or misdiagnosis of depression. This factor along with linguistic considerations is especially relevant when considering the experiences of children who are refugees and asylum seekers. Often readjusting from situations of extreme loss and trauma, refugee children and British born children of refugee parents are likely to present with emotional distress (Hodes, 2004). Moreover, problems in the delivery of psychological therapies for all groups are more acute for those whose first language is not English. This is a complex area that requires sophisticated two-way training of both interpreters and other staff (Malek & Joughin, 2004).

Service providers therefore need to take account of diverse cultural, religious and social mores and how they might affect individual experiences. This might require taking account of research into the racial identity of mental health practitioners (Carter, 1995), which considers the racial identity status of black (African American) and white adult clients and therapists as a key dynamic factor in psychotherapeutic dyads.

In respect to implementation of the Race Relations (Amendment) Act (2000), it has become a mandatory requirement that all key NHS services put into effect an Equalities Policy. This includes the ethnic monitoring of service users. But recent research shows that only a few CAMHS units have to date introduced ethnic monitoring of their service users. Of those that did, very few have used the information to adapt services and meet the needs of the diverse communities they serve. Thus few existing services are structured to communicate with, to enable access to acceptable pathways to services for, or to meet adequately the particular service provision needs of Britain's diverse black and minority ethnic populations. Malek and Joughin (2004) make a number of recommendations concerning mental health services for black and minority ethnic

children and adolescents, including that services are developed and evaluated in collaboration with members of black and minority ethnic groups.

3.8 Clinical practice recommendations

3.8.1.1 Healthcare professionals involved in the detection, assessment or treatment of children or young people with depression should ensure that information is provided to the patient and their parent(s) and carer(s) at an appropriate time. The information should be age appropriate and should cover the nature, course and treatment of depression, including the likely side-effect profile of medication should this be offered. (GPP)

3.8.1.2 Healthcare professionals involved in the treatment of children or young people with depression should take time to build a supportive and collaborative relationship with both the patient and the family or carers. (GPP)

3.8.1.3 Healthcare professionals should make all efforts necessary to engage the child or young person and their parent(s) or carer(s) in treatment decisions, taking full account of patient and parental/carer expectations, so that the patient and their parent(s) or carer(s) can give meaningful and properly informed consent before treatment is initiated. (GPP)

3.8.1.4 Families and carers should be informed of self-help groups and support groups and be encouraged to participate in such programmes where appropriate. (GPP)

3.8.1.5 Where possible, all services should provide written information or audiotaped material in the language of the child or young person and their family or carer(s), and professional interpreters should be sought for those whose preferred language is not English. (GPP)

3.8.1.6 Consideration should be given to providing psychological therapies and information about medication and local services in the language of the child or young person and their family or carers where the patient's and/or their family's or carer's first language is not English. If this is not possible, an interpreter should be sought. (GPP)

3.8.1.7 Healthcare professionals in primary, secondary and relevant community settings should be trained in cultural competence to aid in the diagnosis and treatment of depression in children and young people from black and minority ethnic groups. This training should take into consideration the impact of the patient's and healthcare professional's racial identity status on the patient's depression. (GPP)

3.8.1.8 Healthcare professionals working with interpreters should be provided with joint training opportunities with those interpreters, to ensure that both healthcare professionals and interpreters understand the specific requirements of interpretation in a mental health setting. (GPP)

3.8.1.9 Healthcare professionals specialising in depression in children and young people should work with local CAMHS to enhance specialist knowledge and skills regarding depression in these existing services. This work should include providing training and help with guideline implementation. (GPP)

3.8.1.10 The development and evaluation of services for children and young people with depression should be undertaken in collaboration with stakeholders involving patients and their families and carers, including members of black and minority ethnic groups. (GPP)

4 Screening and risk factors

4.1 Introduction

This chapter reviews information currently available on the ways of identifying depression in children and young people using self-report and other report and interview assessments. The second part of the chapter identifies factors (social and individual) that are known to be associated with depression in children and young people. Healthcare professionals need to be aware of the limitations in the ability to identify depression unequivocally as well as the probabilistic nature of the factors that increase the likelihood of the presence of depression. The judicious combination of knowledge of risk factors and the appropriate use of screening instruments, however, could greatly increase sensitivity to the presence of this disorder in children and young people.

4.2 Screening instruments

4.2.1 Introduction

Epidemiological studies have shown that many young people and some children in the community who are depressed remain undetected (Angold & Costello, 2001). Even in child mental health clinics depressive signs and symptoms may be missed through cursory inquiry or greater attention being paid to other concurrent difficulties in the child or family. As a consequence efforts have been made to develop instruments that are capable of detecting clinically depressed children and young people in different community and clinical settings (Dierker *et al*., 2001; Pavuluri & Birmaher, 2004).

4.2.2 Principles of detection

To date most instruments developed for the purpose of detecting depression in young people have been focused on either detecting a given disorder according to operationally defined criteria or characterising a defined set of signs and symptoms according to a given content. ***Criterion validity*** refers to the ability of the instrument to 'find' the cases of interest in the population being examined. ***Content validity*** refers to the ability of the instrument to characterise the symptoms that occur within the disorder. These key issues are not the same and it cannot be assumed that they will always work together in producing the 'best instrument'. For example criterion validity for DSM-IV major depression may be best achieved by merely asking a few questions knowing that if these are answered 'yes' there is a very good chance the young person is currently clinically depressed. In contrast, content validity requires asking many questions to determine the full form of symptoms, which would include uncommon and common symptoms, many of which might only be weakly associated with the disorder. If we want to find individuals with a predefined syndrome of major depression we need instruments that are focused on criterion validity. If the task is to determine the range of depressive symptoms in the community at large we need instruments that are focused on content validity.

4.2.3 Who should be asked?

There is general agreement in child mental health research that both criterion and content validity for common behavioural and emotional problems in children and adolescents are best achieved by asking both a parent and the child about their current symptoms and problems and combining the two sets of answers to achieve a best estimate of detection. For depression it appears that parent reports alone are likely to miss clinically depressed offspring (Pavuluri & Birmaher, 2004). In contrast, child and adolescent reports are likely to include individuals who are not depressed. Thus parents appear to under report and children over report depressive signs and symptoms. Other potential reporters (teachers, siblings and peers) appear somewhat more like parents except in the case of close confidants who may report more like the index child.

4.2.4 What should be asked?

This depends on the prevailing set of definitions for depression. Signs and symptoms based on existing syndrome definitions (DSM-IV and ICD-10) are generally seen as the most efficient way of detecting people with disorders. Inclusion of items considered i) important by some clinicians but not in the agreed definition, or ii) providing more detail of a given construct that is considered key needs to be very carefully considered. Seldom is greater detail or wider coverage likely to improve on the ability of the instrument to detect real cases. Often this is an attempt to deal with worries about content when the focus is really on criterion validity. For example some authorities believe that physical signs and symptoms are too important to cover in just one or two questions. Others may express concerns about the lack of detail about the items asking about current depressive thinking. Invariably the key items in an instrument are already closely associated with the additional items and lengthening the instrument to include more content will not improve the ability to find individuals who meet criterion.

4.2.5 Purpose of detection

The purpose of clinical detection is to identify from within a group of individuals those who have the disorder of interest (depressive symptomatology). Is screening an attempt to detect all forms of clinical depression or just a particular type? Is it trying to find individuals who are currently depressed, recently depressed or depressed at previous points in time? Are there special requirements that must be incorporated such as culture, language and ethnicity or features in the child such as age, educational ability or gender? As yet these factors are seldom taken into account in instrument development.

4.2.6 Pragmatics of screening

The likelihood of instruments being acceptable to the population of interest must be considered. This attention to the ***ecological validity*** is of great importance. The length of the screen, complexity of instructions, method of completion and presentation (e.g. paper and pencil, handheld computer, via the web) all influence the extent to which a screening instrument will be completed fully, reliably and by as many respondents as possible.

Psychometrics

Instruments must show ***reliability*** generally through test-retest on the same population at intervals between 1 and 4 weeks apart. If data recorded are not consistent then the instrument is unreliable and cannot be used. The type of statistic used depends on whether the reliability of items, their total scale score or sub-scales,

a categorical threshold or specific diagnosis, is being measured. The ***internal consistency*** of the instrument refers to the extent to which different items measure the same overt construct (e.g. negative thoughts or physical changes). Instrument length can be considerably shortened by reducing the number of items required through these methods to ensure that key areas are covered by as few items as is statistically possible. Validity of the instrument refers to the extent that it is measuring what it purports to measure. There are a number of forms of validity that require different statistical methods. First, items in the instrument should be seen to be measuring the construct of interest (face validity); new instruments can be compared with existing ones known to be valid (concurrent validity); a new instrument can be assessed against a different form of measure already in use as a gold standard e.g. questionnaire for depression against clinical diagnosis by interview (criterion validity); an instrument can be used to determine a given outcome, such as response to treatment or the risk of recurrence (predictive validity); finally a measure can be used to determine change in severity or nature of depression over time (sensitivity to change).

From the public health perspective it is essential to establish how good the instrument is at doing the job it is intended for. The ***sensitivity*** of an instrument refers to the proportion of true cases in the population correctly identified by the tests. An instrument that detects a low percentage of depressed cases will not be very helpful in determining the numbers of children who should receive a known effective treatment, as many individuals who should receive the intervention will not do so. This would make for poor planning and underestimating the prevalence of the disorder and the cost of treatments to the community. As the sensitivity of an instrument increases the number of 'false negatives' it detects will decrease (i.e. the number of cases the instrument says are depressed who are in fact well).

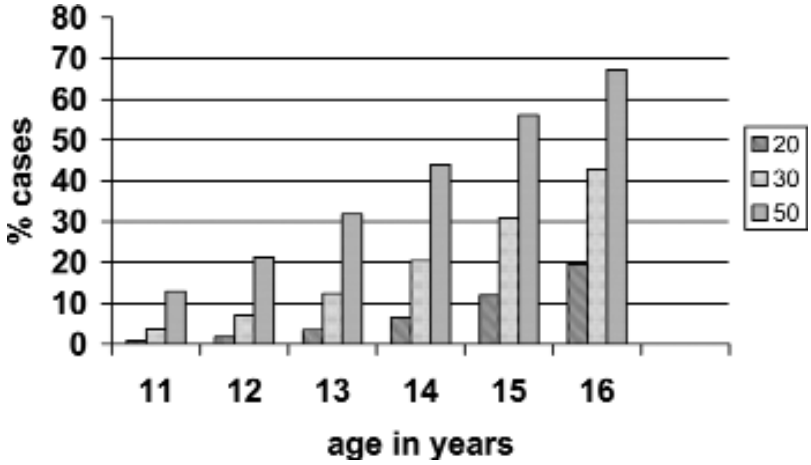
The ***specificity*** of an instrument refers to the proportion of well individuals correctly identified by the test. This is important so that well individuals are not given treatments or other interventions they do not need. As the specificity of an instrument increases the number of 'false positives' will decrease (i.e. the number of well individuals who are said to be depressed).

Instruments with low sensitivity and specificity are very unhelpful screening instruments. They will fail to identify the depressed population with sufficient validity.

There are a number of statistical procedures for determining sensitivity and specificity of which the AUC (receiver operating characteristic) is the most valid as it displays the trade off between sensitivity and specificity at all possible scores available to the instrument. This is displayed as a figure between 0 and 1. An instrument's diagnostic accuracy is considered as follows: AUC $\leq$0.7, low; 0.7–0.9, moderate, $>$0.9 high (Henderson, 1993).

Sensitivity and specificity do not address differences in the prevalence of depression in different populations. To address this, the positive predictive value (PPV) and negative predictive value (NPV) should be considered. The PPV of a test is the probability that the patient has depression when restricted to those patients who test positive. The NPV of a test is the probability that the patient will not have depression when restricted to all patients who test negative. PPV depends crucially on the prevalence of depression in the population screened (i.e. it will be higher in specialist clinics than in the community for the same instrument; also see Figure 3).

Figure 3: Estimated proportion of subjects with depression at each age according to level of self-report depression scores



The legend indicates three levels of MFQ self-report scores, 20, 30 and 50, from a possible range of 0 to 66, obtained from 1056 girls aged 11–16 years. The estimated proportion of cases (y axis) is, as expected, greater for higher scores at each age. Importantly the same level of symptom scores at each age estimates significantly different proportions of cases. This suggests developmentally sensitive differences in adolescent girls for the liability for detecting depression from self-reports. [Data first published in Cooper & Goodyer (1993), pp. 369–374].

4.2.7 Self-rated depression scales as screens

The commonest method used for detecting clinical depression is to ask the child to complete a questionnaire that asks them to record how they have been feeling and thinking recently – often over the past week or 2 weeks. To date, most screening instruments have been about current depression. In addition the focus has in the main been on determining the presence or absence of major depression. There are six available instruments with psychometric data (see Appendix J for further details).

The Beck Depression Inventory (BDI) is a commonly used scale in adult studies, especially when measuring mild/moderate depression (Beck *et al*., 1961). In adolescents however it is not clear that the BDI is truly measuring depression (LeBlanc *et al*., 2002). The reading level and response format may present problems for young adolescents and those with low literacy skills. The scale is sensitive to change in depressed young adult patients (Reynolds & Coates, 1986). The sensitivity and specificity of the scale are not particularly good in adolescents (Roberts *et al*., 1991). Several authors have suggested that rather than clinical depressive disorders the scale measures dissatisfaction and demoralization, non-clinical low mood and anxiety (Brooks & Kutcher 2001).

The Children's Depression Inventory (CDI) is specifically aimed at children under 12 (Kovacs, 1992). The instrument is a modified version of the original BDI developed originally for children under the age of 8. The reliability and internal consistency data are not particularly satisfactory and no single cut-off score works well in both clinical and community settings (Asarnow & Carlson 1985; Stark *et al*., 1987; Kovacs, 1992). There is evidence for sensitivity to change but there are serious concerns that the instrument does not discriminate adequately between depressed and non-depressed children (Stark *et al*., 1987; Meyer *et al*., 1989; Fine *et al*., 1991; Stark & Laurent, 2001). The instrument may be better as a continuous measure of current dysphoric mood than as a screen for the presence or absence of depression.

The Mood and Feelings Questionnaire (MFQ) is aimed for use with children and young people aged 8-17 years. It has a parent and a child form and good diagnostic validity and some predictive validity has been established (Wood *et al*., 1995; Kent *et al*., 1997). The scale has been used in both epidemiological and clinical studies (Costello & Angold, 1988; Messer & Gross, 1995; Messer *et al*., 1995; Goodyer *et al*., 1996; Goodyer *et al*., 2000a; Angold *et al*., 2002). There is normative data showing that the probability of being clinically depressed varies with age and sex (Angold & Rutter 1992; Cooper & Goodyer 1993; Goodyer & Cooper 1993; Angold *et al*., 2002). A score of 50 or more (scale range 0–66) in a 13-year-old girl indicates a 30% probability of being clinically depressed compared with 68% for the same score in a 16-year-old girl (see Figure 3). There is acceptable case detection ability (AUC ranging from 0.75–0.85) in clinical settings with a cut off score of $\geq$27. The instrument does not assess suicidal ideation. There is adequate diagnostic validity for depressed patients but modest epidemiological data on validity of case detection in the community.

The Reynolds Adolescent Depression Scale (RADS) is specifically for adolescents aged 13–18 years (Reynolds, 1987). It has well documented reliability and validity and normative data obtained from school settings in the manual but there are few independent studies reported using this measure. What data there are (including unpublished reports cited in the manual) suggest that the scale has a rather high false negative rate (30%) at the suggested cut-off score for clinical depression and is not particularly effective at detecting change (Radloff, 1977; Brooks & Kutcher, 2001).

The Center for Epidemiological Studies – Depression Scale (CES-D) was developed for use in community studies of adults and subsequently used in adolescents (Radloff, 1977). The overall view is that this scale does not have any clear strengths and many weaknesses when used with adolescents (Garrison *et al*., 1991; Olsson & von-Knorring, 1997; Brooks & Kutcher, 2001). In the younger age group this scale measures general non-clinical emotional turmoil rather than depression.

The Kutcher Adolescent Depression Scale (KADS) shows good reliability and validity and promising sensitivity and specificity (AUC 0.89). There is a very brief 6 item and a longer 16 item version. The brief screen may be effective in ruling out depression in community samples and appears better than the BDI (LeBlanc *et al*., 2002).

There are other depression instruments in the literature but the above have the most evidence base on which to form a judgement regarding reliability, validity and clinical utility. However the Birleson Depression Inventory deserves mention (Birleson *et al*., 1987). This has been used in studies of anxiety, post-traumatic stress disorder and depressive conditions (Kashani *et al*., 1989; Yule *et al*., 1990; Yule & Udwin, 1991). The psychometric properties of the scale are not well described but clinical use suggests that there are very similar component properties to the Beck Depression Inventory and the MFQ.

4.2.8 Interviewer-based instruments

There are four instruments available for assessing the diagnosis of depressive syndromes using direct face-to-face interview procedures (see Appendix J for further details).

The Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS) is a well used reliable and valid procedure for diagnostic assessment of depression including severity of current episode (Kaufman *et al*., 1997). It is interviewer led,

very time consuming and designed to be used by trained individuals with some clinical experience. It is intended for use in participants aged 6–17 years. Originally focused on patients with current psychiatric disorder the most frequently used version has been used in community studies and can assess current and past lifetime episodes according to DSM criteria. Reliability is acceptable but studies are few (Kaufman *et al*., 1997). There is reasonable evidence for validity including the severity scales, predicting depression over time and diagnosing comorbid disorders with depression (Ambrosini *et al*., 1989; McCauley *et al*., 1988; McGee & Williams, 1988; Herbert *et al*., 1996). The instrument is strong in the assessment of depression and good for detailed psychopathology evaluations. However, because it is time consuming it is not ideal for everyday clinic use and it is an inefficient means of assessing change in symptom severity. A brief screening version has been used in one community research project which may prelude a more flexible screening tool in future studies, particularly in combination with a self-report instrument (Goodyer *et al*., 2000a).

The Diagnostic Interview Schedule for Children (DISC) is a highly structured interview that is respondent-based (Costello *et al*., 1985; Edelbrock *et al*., 1985). Its strengths are that it can be given by non-clinical personnel in community settings after a few days' training. The psychometric properties are suspect for depression with high estimates of depression obtained with its use in epidemiological and clinical studies. There are however considerable data with this instrument on a range of psychiatric disorders using both a full and acute down screening version (Shaffer, 1988; Fisher *et al*., 1993; Shaffer *et al*., 1993; Schwab-Stone *et al*., 1996; Shaffer *et al*., 1996; Shaffer *et al*., 2000; Lucas *et al*., 2001). The instrument is not particularly suited to assess change in symptoms.

The Diagnostic Interview for Children and Adolescents-Revised (DICA-R) is also a respondent-based interview with somewhat better features than the DISC that result in quite good validity for clinical depression diagnoses in those detected (Herjanic & Reich 1982; Reich *et al*., 1982). The psychometric properties are acceptable to good with more recent versions to be used with both child and parent (Welner *et al*., 1987; Reich, 2000a; Reich, 2000b). The instrument can be used in both community and clinical populations but its relationship to DSM-IV diagnosis is unclear. There appears to be, however, a potential tendency to under diagnose depression in adolescents whilst over-diagnosing externalising disorders although there is modest data overall in this regard.

The Child and Adolescent Psychiatric Assessment (CAPA) is a detailed interviewer led instrument that is good at delineating clinical depression and other diagnoses (Angold & Costello, 2000). Lay interviewers can use it with training. The CAPA incorporates interviewer and respondent-based approaches. There is an extensive glossary for interviewers that details operational definitions for symptoms, distress ratings and symptom frequencies which interviewers make. There is a child and a parent version. The instrument is highly reliable for diagnosing depression (Angold & Costello, 1995). There is as yet no concurrent validity study for the instrument but considerable support for its concurrent validity has accumulated from other sources, twins, sex differences and family studies (Angold *et al*., 1996; Costello *et al*., 1996a, 1996b; Angold *et al*., 1998). The strengths of the instrument are in the highly reliable diagnosis of depression in the 9- to 16-year-old population of both sexes; that lay persons can use it after 2–4 weeks training; and the extensive glossary for standard coding within and between interviewers. In its current form the CAPA is intended as a research tool.

It has the required clinical framework and potential to be modified and considered for use in clinical practise subject to the necessary field trials.

The Development and Well-Being Assessment (DAWBA) is a novel package of questionnaires, interviews, and rating techniques designed to generate ICD-10 and DSM-IV psychiatric diagnoses on 5–16-year-olds. Non-clinical interviewers administer a structured interview to parents about psychiatric symptoms and resultant impact. When definite symptoms are identified by the structured questions, interviewers use open-ended questions and supplementary prompts to get parents to describe the problems in their own words. These descriptions are transcribed verbatim by the interviewers but are not rated by them. A similar interview is administered to 11–16-year-olds. The DAWBA has a growing track record as an epidemiological measure in UK populations, and may prove to be of general clinical value too (Goodman *et al*., 2000). Further examination of this instrument for use in clinical practise with depressed patients could be considered but its specific value over and above the CAPA and the K-SADS for the diagnosis of depression is not known.

4.2.9 Clinical summary

4.2.9.1 Self-report questionnaires

There are a number self-report measures available for screening in community and clinical populations. There is very little comparative data between the available questionnaires. With the exception of the MFQ there are no developmental sensitivity data. The evidence suggests that a self-report questionnaire approach for diagnostic screening of depression in pre-pubertal children is not advised. For adolescents the MFQ is amongst the most studied and the most robust.

4.2.9.2 Interviews

The interview measures available were not designed to act as screens. Their current form makes them unlikely to enhance the screening process. A direct screen interview would be highly desirable for certain settings such as in residential care, with learning disabled patients or others with special needs limiting the use of self-reports. Again, computer-based interview procedures have yet to be made available.

Overall universal screening for depressive disorders in the community at large is not recommended. In addition there is no evidence to screen very high-risk groups (e.g. looked after children, asylum seekers and refugees, and those with exposure to multiple risk). Current available tools, both self-report and interviewer-based instruments are potentially important adjuncts in the detection of depressive diagnoses in symptomatic individuals and those of concern to child professionals.

4.2.9.3 Conclusion

Depressive disorders in children of primary school age are unlikely to be detected using paper and pencil tests. There is insufficient use of computer technology and more child friendly methods of assessing current mood and feelings. Pictorial (drawings and art work) and interactive methods should be examined for future use. In primary care, any screening instrument should be user-friendly for the health worker. Computer versions could assist by automatically scoring and even recommending action on the basis of resultant scores. This may improve take-up of screening devices in schools, other community settings and even busy clinical services looking to improve the time it takes to determine the needs and assessment pathway of new referrals.

Despite these caveats the evidence is that child mental health policies have been influenced by the findings using the available instruments. For example screening programmes have been utilised in schools as part of intervention programmes for depressed children and young people (Andrews *et al*., 2002; Burns *et al*., 2002). Clinical services can now consider the use of self-reports as adjuncts to the standard clinical process. Uptake is probably influenced by a large perceived increase in workload compared with the small clinical gain over standard clinical procedures.

There is a reason to be optimistic that a second generation of screening devices could be used in primary care and clinical services. The biggest obstacles will be delivery by an overworked professional workforce poorly trained and/or supported in computer aided assessment tools. Computerised devices that allow item responses to be converted into scale scores and into written advice options is likely to greatly enhance their use. This technology could be applied to questionnaire, interview and non-verbal data from drawings and art work. Pilot studies are required in primary and secondary care settings on computer-aided devices as an adjunct to assessment of face-to-face interviews. These could be usefully be carried out in schools and clinics.

4.3 Risk factors

4.3.1 Introduction

4.3.1.1 What is meant by risk

Risk is the degree to which the likelihood of a given adverse outcome will occur following exposure to a defined toxic agent. The relative importance of exposure is estimated by the probability of the outcome occurring in a given population compared with the level of occurrence in a non-exposed population. Risks for depression occur from a variety of sources both within and external to the child. For example, individuals may be born with genes that render them susceptible to depression, acquire lesions such as head injury that alter their ability to control mood, suffer infections that result in altered brain metabolism, be exposed to chronic family discord or to negative peer group environments that alter the development of emotional processing and self-percept (Goodyer, 2001). In addition, there may be risks associated with poor housing or living in a violent or dangerous society. Almost all research concurs that the onset of clinical depressions occur as a consequence of multiple rather than single risk effects that are frequently not independent of each other (Kraemer *et al*., 1997). There is however less agreement about how risks exert their effects over time or what they do to the individual to bring about psychiatric signs and symptoms and functional impairments.

4.3.1.2 Relations between risks over time and the magnitude of their effects

The size of the association between a risk factor and onset of disorder indicates its potency and is the maximal discrepancy achievable between depressed and not depressed groups exposed and unexposed to risk. For example exposure to severely and personally disappointing life events in adolescents occurring in the month prior to onset of depression is estimated to increase the risk for depression about nine times over not being exposed (Goodyer *et al*., 2000b). These estimates regarding one type of risk can be misleading as seldom are all the known adversities measured in one study. When measuring a range of possible risks in the same study we need to know three things: i) if risks that occur at a distance in time (i.e. months and years previously) influence the occurrence and the effects of more recent adversities such as acute

personally undesirable life events; ii) if these distal processes themselves increase the liability for depression regardless of proximal risks and; iii) if there is some form of combined effect arising from exposure or possession of risks occurring distally and proximally not explained by one set or the other.

For example 60% of all adolescents with depression are exposed to acutely disappointing life events in the month prior to the onset of the disorder but more than 90% are already exposed to two or more previous ongoing risks either in their social environment or within themselves (Goodyer *et al*., 2000a; Goodyer, 2001). The impact of the recent adversity can only best be appreciated by taking into account the contribution of past risks on both the liability for the recent event and the onset of disorder. Current evidence from adult studies shows that there are very likely to be multiple risk pathways that may lead to the emergence of depressive illnesses (Kraemer *et al*., 1997). These involve genetic predispositions, different types of adversities occurring during the first two decades of life and acute personally disappointing life events not a consequence solely of past difficulties in the weeks prior to onset (Kendler *et al*., 2002). Adolescents at high risk for depression are exposed to, or possess on average, three psychosocial risks in the 12 months before follow-up (Goodyer *et al*., 2000b). Around 1 in 5 of this high psychosocial risk population will get depressed over the ensuing 12 months. Thus even amongst those at very high risk a significant number do not immediately become depressed. The presence of an acute event considerably increases this liability.

4.3.2 Typology of risk

Environmental risks are invariably classified by their:

- personal characteristics (e.g. accident, illness including post-infective mood states, financial etc.)
- latent psychological process inferred from these (e.g. disappointment, danger)
- personal focus (self, parent, friend, etc.)
- origin (self-induced, independent of self)
- time of onset and (less frequently) offset giving duration of exposure
- locus of control (uncontrollable by self, controllable)
- age and developmental stage of exposure (prematurity, infancy, childhood adolescence, pre- or post-puberty).

Unfortunately there is no agreed standard definition for classifying risks and most studies use widely different methods and classification processes.

4.3.3 Social risks

Social adversities that are most associated with the onset of depression are those that are outside the child's control, occur as unpredictable happenings in the daily environment and recur over time. They mainly arise within family relationships or within friendships and are largely interpersonal in nature (Rueter *et al*., 1999; Goodyer, 2001).

4.3.3.1 Family risks

The most common group of adversities to occur within the family, which are relational in origin and produce negative effects on the child, arise from dysfunctions between two or more people. Perhaps the commonest of these are marital discord and emotional difficulties between one parent and the child, although parental psychopathology may underlie a significant proportion of these (Hammen & Brennan, 2003; Hammen *et al*., 2004).

The impact of events within the family on the child, such as physical maltreatment, are also associated with the onset of depression, but the onset appears often to be at a considerable distance in time from such abuse events (Jaffee *et al*., 2002). However both violence and sexual abuse to the child by parents, siblings or strangers are associated with depression, as are severe acute family difficulties such as sudden death, serious physical illness in a close relative or sudden separation of parents.

In contrast, unhappy marriages, parents being away from home due to work, low income, poor housing and living in a deprived neighbourhood occurring singly are not strongly associated with clinical depressive onsets in young people. Overall mild ongoing dysfunctions in family life do not appear on their own to be markedly associated with the subsequent onset of clinical depression (Tamplin *et al*., 1998; Tamplin & Goodyer, 2001). However, persistent family disagreement through early adolescence does increase the general level of low mood and depressive symptoms over time (years) and it is this rising level of non-clinical negative mood and thoughts that is associated with the onset of later clinical depression in older adolescents (Rueter *et al*., 1999).

Those children with higher IQ, better family functioning, closer parental monitoring, more adults in the household, and higher educational aspiration are less likely to show depression in the presence of elevated psychosocial risk (Tiet *et al*., 1998). In the absence of these protective or buffering factors the risk for both emotional and behavioural difficulties arises when children and young people are exposed to adversities. The more the family environment is chronically emotionally neglectful, involves chronic marital discord and a lack of authoritative parenting (the ability to be firm and clear within a positive emotional environment), the greater the risks for psychiatric disorders in general including personality difficulties in young adult life. Psychiatric disorder in a parent is another high-risk adversity for the child, with parental history of recurrent depression over the lifetime of the child strongly associated with depression in the offspring (Hammen *et al*., 1990; Hammen & Brennan, 2003).

Depression runs in families with a resultant increased risk for depression in the offspring of adults with a history of depression. Adults with a history of depression may also have a dual diagnosis such as substance misuse or alcoholism (Stallings *et al*., 1997). Thus there is an increased association between depression, substance misuse and alcoholism in parents and psychiatric disorders in offspring. Children and adolescents within such families may therefore be at risk for a range of undesirable outcomes including depression, behaviour disorders and substance misuse.

4.3.3.2 Friendship risks

Non-family-based adversities are also associated with the onset of depression and other psychopathologies in young people. Children with poor friendships, characterised by low numbers of friends, infrequent contact and no intimate relations, are more likely to develop depression as well as deviant behaviours and increased social isolation from the desired peer network (Goodyer *et al*., 1990; Cairns *et al*., 1995; Bukowski *et al*., 1996;

Hartup, 1996). This appears to be independent of family strengths and weaknesses. The most potent form of acute negative life event is that of a recent (last few weeks) severe personal disappointment (i.e. the failure of a previously held belief in an expected outcome) with a close friend (Goodyer *et al*., 2000b). When recent personal disappointments with a close friend arises its effects as a risk factor is particularly large in those with previous psychosocial risks (Goodyer *et al*., 2000b). Depression is markedly increased in the presence of multiple adverse experiences involving both longstanding family and more recent friendship events and difficulties. Under these social conditions, the child may not perceive an emotionally supportive relationship in their social world.

4.3.4 Individual risks

4.3.4.1 Genetic risks

Current evidence suggests that while genetic factors appear somewhat less important in child onset depression, there are genetic contributions to adolescent depression (Rice *et al*., 2002). The environmental processes may be similar in nature but the implication is that these are sufficient to cause depression in the pre-pubertal child but insufficient in the post-pubertal adolescent. The studies on which this review is based are twin samples in which depressive symptoms are the outcome rather than clinical disorders. It is not clear if genetic factors are low in pre-pubertal children with clinical depressions, which are rare in this population (Angold & Costello, 2001). The precise genes involved remain unknown. In addition, the genetic risks may not act directly to produce the disorder, but act through increasing the liability for other risks in the environment. There may be a complex patterning of gene-environment interactions combining to cause depressions in the post-pubertal depressed adolescent (Caspi *et al*., 2003b). In contrast, direct associations (and therefore effects) of single genes with depression are uncommon (Henderson *et al*., 2000; Zill *et al*., 2002).

4.3.4.2 Temperament

Children and adolescents (as well as adults) with a highly emotional temperamental style (react quickly to everyday events, easily brought to tears, easily soothed) are more likely to be depressed than those low in these behavioural characteristics (Goodyer *et al*., 1993; Hodgins & Ellenbogen, 2003; McWilliams, 2003). Although this is true for both sexes, more girls than boys have this temperament and this may be one component that differentially increases the risk for depression in females over males. The evidence suggests that there are genetic influences on individual variations in temperament (Eley *et al*., 2003; Sen *et al*., 2004). The relationships between temperament and personality development over time suggests that there is coherence across time between the commonest used in both terms although the precise definitions appear to be somewhat different (Caspi *et al*., 2003a; Shiner *et al*., 2003). The precise relations between personality and later depression remain unclear but neuroticism shows an important but complex relationship with depressive onset (Kendler *et al*., 2004).

4.3.4.3 Cognitions

As well as emotional styles, there are thinking styles that increase the liability for depression. High levels of particular types of self-critical thoughts known as global self-devaluations (thinking of oneself as abandoned, a failure, feeble, incapable, a loser, a mess, pathetic, pitiful, rejected, stupid, unlovable, unwanted, useless, worthless), if present at times of low mood are significantly associated with clinical depression (Teasdale & Cox, 2001). A ruminative style, in which young people dwell or even

perseverate on a particular thought, also increases the risk for depression. Adults and adolescents with both global self-devaluations and a ruminative style have markedly increased risk for depression (Alloy *et al*., 1999). Ruminating lowers mood and increases memory difficulties in adolescents (Park *et al*., 2004).

4.3.4.4 Physiological risks

Studies of physiological factors as risk components for depression in young people are relatively new and few have been published. There is some evidence that both the monoamines and glucocorticoids are implicated in the biology of depression in children and adolescents (Birmaher & Heydl, 2001). Children with a positive family history of depression show abnormalities of serotonin function even when well, suggesting serotonin vulnerability for subsequent affective disorders. Increased cortisol and a second adrenal steroid dehydroepiandrosterone (DHEA) are both elevated and predict the onset of depression in a subset of adolescents at high psychosocial risk for depression (Goodyer *et al*., 2000a). Elevated cortisol levels may themselves arise in part from interpersonal difficulties in early parenting related to maternal depression (Halligan *et al*., 2004). High risk children and young people with no history of prior depression but with a positive family history for the disorder have also been shown to have abnormalities in sleep architecture associated with subtle changes in cortisol secretion (Dahl *et al*., 1996; Feder *et al*., 2004). Overall the evidence suggests biological vulnerabilities in both the serotonin and the adrenal steroid systems. These are likely to be brought about by a combination of genetic and environmental influences.

4.3.5 Very high-risk groups

Within the child and adolescent population at large there are known groups at very high risk for mental health difficulties including depression. These are already the focus of policy review and include looked after children, refugees, the homeless and asylum seekers. Children and adolescent offenders, particularly those in secure institutions, are particularly at risk for mental difficulties. The known numbers of successful suicides in young offenders strongly indicates high levels of depression that currently may not be adequately assessed or managed. It is unclear if ethnicity exerts a specific risk for depression above and beyond the known increase in social, behavioural and emotional difficulties for selected populations (e.g. Afro-Caribbean). Maltreatment as risk has already been mentioned but 'Hidden maltreatment' should be considered in children with adolescents with unexplained mood disorders with no family history of depression and an absence of other overt social adversities.

4.3.6 Special risk groups

Finally there are some families and individuals who have a known set of risk actors whose precise theoretical mechanism (vulnerability, activating or formation) is unclear. These include children with a physical or a learning disability. Disabled children are more at risk for mental illness and behavioural problems including depressive disorders, compared with the population at large (Dekker *et al*., 2002; Goodman, 1998; Martinez & Semrud-Clikeman, 2004). Because of their visible handicaps, challenging behaviours and/or their more overt educational difficulties, mood disorders may be easily missed in such individuals. Likewise adolescents with complex endocrine diseases, adverse reactions to drug treatments, pervasive developmental disorders, autism and Asperger's syndrome are at risk greater than would be expected by chance or by the effects of

being physically or developmentally impaired. Clinical services may need to consider depressive disorders in these adolescents when social withdrawal and/or irritability are presenting features or there is a persistent exaggeration of their obsessional habits and mannerisms suggesting a mood disorder.

4.3.7 Summary

1. Risks for depression are multiple in origins and may be correlated with each other. Single risks resulting in the onset of clinically meaningful depression are rare.

2. The majority of first depressive episodes arise in adolescents compared with children and in the presence of at least two and invariably three long-standing psychosocial risks.

3. Acute life events are key destabilising elements in those already at high psychosocial risk evoking relatively sudden onset in about 50% to 70% of cases. The other third to a half appears to arise more slowly through chronic persisting interpersonal difficulties.

4. Genetically mediated factors via the serotonin and adrenal steroid systems may be important features in determining potency of social adversities.

5. The intermediate psychological vulnerabilities for adolescents between physiology and the social environment are a high level of global self-devaluative thinking at times of low mood in combination with a ruminative thinking style.

6. There is increasing evidence that the pattern and potency of risks varies with development, severity and number of episodes of depression.
   The physiological risks for recurrence appear to be greater with an increasing number of past depressive episodes suggesting an effect of depression on brain function.

4.3.8 Risk classification

It is critical to remember when looking at this list that the specificity of individual risk factors to the onset of depressive disorders is low to moderate, with the exception of those starred * where specificity is high.

4.3.8.1 Probable vulnerability factors

These increase the general liability to but seldom directly provoke disorder:

- Presence of short arm serotonin promoter gene
- Elevated morning cortisol levels
- Acquired fetal infections
- Maltreatment or emotional neglect through infancy
- Maternal postnatal depression

- Parental history of depressive disorder*
- Brain illnesses in childhood including trauma and infection
- Being female*
- Being post-pubertal*
- Divorced parents
- Chronic parental psychiatric illness.

4.3.8.2 Probable activating factors

These are directly implicated in the onset of depressions and in the presence of vulnerability factors their effects can be large:

- Personally undesirable life events resulting in permanent change of interpersonal relationships in friends or family*
- Acute brain illnesses
- Community disasters such as war, famine and infections
- Personal assault.

4.3.8.3 Formation factors

These are responsible for the clinical characteristics of the depressive state:

- Past history of depressive symptoms*
- High trait levels of neuroticism (Kendler *et al*., 2004) or emotionality*
- Ruminative style of thinking*.

4.3.8.4 Known risk factors whose precise role is currently unclear

These may be vulnerability, activating or formation factors but currently available information does not permit the classification of their role:

- Self-devaluative thinking
- Poor school performance
- Bullying
- Co-existing medical illnesses
- Death of close relative
- Death of a pet
- Obesity.

4.3.8.5 Protective factors

These reduce the likelihood of depression in the presence of vulnerability and activating factors:

- A good sense of humour
- Positive friendship networks
- Close relationship with one or more family member
- Socially valued personal achievements
- High normal intelligence.

4.4 Clinical recommendations

4.4.1 Screening

4.4.1.1 Children and young people of 11 years or older referred to CAMHS without a diagnosis of depression should be routinely screened with a self-report questionnaire for depression (of which the Mood and Feelings Questionnaire [MFQ] is currently the best) as part of a general assessment procedure. (B)

4.4.1.2 Training opportunities should be made available to improve the accuracy of CAMHS professionals in diagnosing depressive conditions. The existing interviewer-based instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) could be used for this purpose but will require modification for regular use in busy routine CAMHS settings. (C)

4.4.1.3 Within tier 3 CAMHS, professionals who specialise in the treatment of depression should have been trained in interviewer-based assessment instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) and have skills in non-verbal assessments of mood in younger children. (GPP)

4.4.1.4 Healthcare professionals in primary care settings should be familiar with screening for mood disorders. They should have regular access to specialist supervision and consultation. (GPP)

4.4.1.5 For any child or young person with suspected mood disorder, a family history should be obtained to check for unipolar or bipolar depression in parents and grandparents. (GPP)

4.4.1.6 The form of assessment should take account of cultural and ethnic variations in communication, family values and the place of the child or young person within the family. (GPP)

4.4.2 Risk factors

4.4.2.1 Healthcare professionals in primary care, schools and other relevant community settings should be trained to detect symptoms of depression,

and to assess children and young people who may be at risk of depression. Training should include the evaluation of recent and past psychosocial risk factors, such as age, gender, family discord, bullying, physical, sexual or emotional abuse, comorbid disorders, including drug and alcohol use, and a history of parental depression; the natural history of single loss events; the importance of multiple risk factors; ethnic and cultural factors; and factors known to be associated with a high risk of depression and other health problems, such as homelessness, refugee status and living in institutional settings. (C)

4.4.2.2 Healthcare professionals in primary care, schools and other relevant community settings should be trained in communications skills such as 'active listening' and 'conversational technique', so that they can deal confidently with acute sadness and distress ('situational dysphoria') that may be encountered in children and young people following recent undesirable events. (GPP)

4.4.2.3 Healthcare professionals in primary care, schools and other relevant community settings who are providing support for a child or young person with situational dysphoria should consider ongoing social and environmental factors if the dysphoria becomes more persistent. (GPP)

4.4.2.4 CAMHS tier 2 or 3 should work with health and social care professionals in primary care, schools and other relevant community settings to provide training and develop ethnically and culturally sensitive systems for detecting, assessing, supporting and referring children and young people who are either depressed or at significant risk of becoming depressed. (GPP)

4.4.2.5 When a child or young person is exposed to a single recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, healthcare professionals in primary care, schools and other relevant community settings should undertake an assessment of the risks of depression associated with the event and make contact with their parent(s) or carer(s) to help integrate parental/carer and professional responses. The risk profile should be recorded in the child or young person's records. (C)

4.4.2.6 When a child or young person is exposed to a single recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, in the absence of other risk factors for depression, healthcare professionals in primary care, schools and other relevant community settings, should offer support and the opportunity to talk over the event with the child or young person. (GPP)

4.4.2.7 Following an undesirable event, a child or young person should not normally be referred for further assessment or treatment, as single events are unlikely to lead to a depressive illness. (C)

4.4.2.8 A child or young person who has been exposed to a recent undesirable event, such as bereavement, parental divorce or separation or a severely disappointing experience and is identified to be at high risk of depression

(the presence of two or more other risk factors for depression), should be offered the opportunity to talk over their recent negative experiences with a professional in tier 1 and assessed for depression. Early referral should be considered if there is evidence of depression and/or self-harm. (GPP)

4.4.2.9 When a child or young person is exposed to a recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, and where one or more family members (parents or children) have multiple-risk histories for depression, they should be offered the opportunity to talk over their recent negative experiences with a professional in tier 1 and assessed for depression. Early referral should be considered if there is evidence of depression and/or self-harm. (GPP)

4.4.2.10 When the clinical progress of children and young people with depression is being monitored in secondary care, the self-report Mood and Feelings Questionnaire (MFQ), should be considered as an adjunct to clinical judgement. (C)

5 Self-help, family support/parental education and social/environmental interventions

5.1 Self-help

5.1.1 Introduction

Self-help is not well defined and the term is often used interchangeably with 'self-management', 'self-instruction', 'self-care' or 'psycho-educational' interventions (Department of Health, 2003). Recent research considered self-help to be characterised by two particular features:

- Either no or only 'minimal' practitioner input
- Instruction on how users can improve their skills to cope and manage their difficulties (Lewis *et al*., 2003).

In its broadest context, 'self-help' for depression could include any activity or lifestyle choice that an individual makes in the belief that it will confer therapeutic benefit (e.g. taking more exercise, modifying diet, reducing or increasing alcohol intake).

The majority of self-help approaches are used outside the health service, by individuals and self-help organisations (Lewis *et al.*, 2003). Reference to 'self-help' for children includes self-help materials that can be used by parents or with the assistance of parents, as it is acknowledged that children, by virtue of their dependence on adults because of their age or developmental status, may be unable to help themselves. When the intervention is based on a psychological approach this may be formalised as guided self-help (see Chapter 6 for further information about the evidence regarding the effectiveness of guided self-help).

Self-help, in the guise of self-management, is the underlying principle of the expert patient programme (Department of Health, 2001), which affirms the government's intention to empower patients to become more involved in their treatment and care. The programme is one of many initiatives that illustrate the changing ethos of the health service as it moves towards an emphasis on self-sufficiency and patient choice (Department of Health, 2003; Farrell *et al*., 2004).

5.1.2 Types of self-help

For the purposes of this guideline 'self-help' involves a structured approach to the use of informational guidance and does not include any activity that results in self-harm (e.g. excessive consumption of alcohol). Self-help materials can be stand-alone, may be used with limited support from healthcare professionals (guided self-help), or used as an adjunct to more intensive psychotherapy or medication.

It is perhaps useful to consider children and young people utilising self-help strategies and resources in three ways:

- To maintain healthy body and mind throughout development
- When they know something is wrong but are not sure what, or do not know where to go for help
- Following diagnosis of depression.

Information may encourage positive help-seeking behaviour and concordance with treatment plans. Self-help may include:

- Complementary/alternative therapies
- Contact with voluntary organisations
- Educational leaflets
- Exercise
- Healthy diet
- Helpline/information line/the internet
- Mentoring/spiritual guidance
- Peer support groups
- Self-diagnosis tools
- Sleep and relaxation
- Social networks
- Talking to family and friends.

These strategies can be used by anyone who has symptoms of depression, whether or not they have been in contact with statutory services or have received a diagnosis. It must be remembered that the majority of depressed children and young people cope alone. Further information about the most common forms of self-help is provided in Appendix K, with additional self-help resources provided in Appendix L.

5.1.3 Who would benefit from self-help?

Children and young people often find it difficult to talk about their feelings to anyone. Research suggests that only a third of teenagers with mental health problems who need help will ask for it, usually from informal sources such as families and friends (Offer *et al.*, 1991; Rickwood & Braithwaite, 1994; Boldero & Fallon, 1995).

Possible reasons behind adolescent reluctance to seek help include:

- Feeling that their help-seeking behaviour would not be kept confidential
- Feeling that no person or helping services could help
- Feeling that the problem was too personal to tell anyone
- Feeling that they could handle the problem on their own

(Dubow *et al*., 1990).

Healthcare professionals must therefore remember that children and young people may have difficulty expressing their feelings and may present with physical manifestations of their depressed mood.

It is likely that different types of self-help will appeal to different types of patient depending on many variables including age, literacy, speech and language abilities, knowledge-base, experience, confidence with computers, type, severity and duration of depressive symptoms. In addition, different types of self-help will be relevant according to the severity of symptoms and availability of support. Self-help may be the only option for some children/young people who may not be able to access services either because of lack of parental support, knowledge or understanding, social unacceptability or geographical inaccessibility.

Whenever healthcare professionals come into contact with children and young people who live in families under-going emotional upheaval, the mental health needs of the children/young people should be considered. Recommended action may include referral to relevant support groups (for example, relating to young carers, substance misuse, bereavement) or other targeted self-help options (e.g. leaflets). Due to the common occurrence of depression in the offspring of depressed parents, special consideration should be given to assessing and supporting children with family members being treated for depression.

5.1.4 Evidence for the effectiveness of self-help strategies

A search of the available literature revealed only one study evaluating a self-help intervention in children/young people (Ackerson *et al.*, 1998; further information on this trial can be found in Chapter 6), although some other materials have been studied in adults (see Appendix L for a list of self-help resources).

5.1.5 Clinical summary

Self-help interventions may be the treatment of choice for some children/young people themselves, or their parents. It is therefore necessary for any professional who comes into contact with depressed children and young people to know what self-help resources are available, evidence of their effectiveness or contra-indications if there is any and, if not, which resources children/young people and their parents have found to be helpful.

5.2 Family support/parental education

5.2.1 Introduction

Family risk factors for depression in children and adolescents include parent-child conflict, parental discord, divorce and separation, parental death, parental mental illness

and parental substance misuse (Reynolds & Rob, 1988; Patten *et al.*, 1997; Shochet & Dadds, 1997; Beardslee *et al.*, 2003; Stallings *et al*., 1997). The risk is thought not to lie in the variable per se but in its effects on attitudes, behaviour and relationships within the family.

Children who are undiagnosed but deemed to be at high risk of depression can be targeted for preventative intervention in two ways: 1) those in subgroups of the population where life events, demographic factors and other variables have been shown to increase risk; 2) those who display some of the symptoms of depression (Gillham *et al.*, 2000).

5.2.2 Narrative review

A systematic search of the literature identified five RCTs where family support/parental education were part of a treatment program aimed at children and adolescents identified as at risk for depression. Four of the studies focused on at-risk populations and one was for children displaying symptoms of depression (Asarnow *et al.*, 2002). The earliest study (Black & Urbanowicz, 1987), was the only one that did not provide minimal intervention for the control group. It was also the only study not to be based on the principles of CBT.

5.2.2.1 Bereavement

Research has highlighted increased levels of mental health problems among bereaved children (Sandler *et al.*, 2003). Two studies have examined whether interventions aimed at family bereavement have a positive impact on mental health outcomes (BLACK1987; SANDLER2003).[6]

SANDLER2003 randomly assigned 156 families (including 244 children between 8–16 years) to either the Family Bereavement Program (FBP) or to a self-study program. The FBP involved separate groups for carers, children and young people. There were twelve group sessions for each group, four of which involved joint carer and child/young person activity and an additional two sessions for each individual family. Two trained facilitators, who worked from a manual and received post-session supervision, facilitated the groups. The carer group focused on teaching techniques to improve carer–child relationships and parenting skills. The same skill domains were used across child and young person groups, with programs geared towards different developmental levels. The groups aimed to improve positive coping, coping efficacy, control-related beliefs, self-esteem and negative appraisals for stressful events through teaching skills for cognitive reframing, distinguishing between controllable and uncontrollable events and problem-solving. Opportunities were also provided for the expression and validation of grief-related feelings. The self-study group were sent three books each at monthly intervals related to adult, child or adolescent grief. Books were accompanied by a syllabus briefly outlining the important issues covered in the book (further information about the study can be found in Appendix Q on CD-ROM).

[6]Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is *in press* or only submitted for publication, then a date is not used).

Outcomes measured at pre-intervention, post-intervention and 11-month follow-up included several proximal risk and protective factors and distal mental health outcomes in the child/young person. Evaluation of the FBP showed an improvement in family and individual risk and protective factors post-intervention, but at 11-month follow-up the improvement in proximal outcomes was found primarily in girls and in those with poor scores at baseline (see Appendix Q on CD-ROM for further information about the results). Positive effects on child/adolescent mental health were found at 11-month follow-up for girls and for those with more mental health problems at baseline. This study had several important strengths that improve generalisability: provision of a detailed manual and had high level of fidelity of implementation; high level of participant retention in both groups; the sample was heterogeneous in terms of ethnicity, socio-economic status, cause of death and gender of deceased.

BLACK1987 conducted a small-scale intervention study in the UK involving 80 families where a parent had died; 46 families (including 83 children) were randomly assigned to a treatment group and another 34 families were randomly assigned to a control group. The treatment group were seen by experienced psychiatric social workers, who worked in child psychiatry settings and who had received training in bereavement counselling. Each family was offered six family therapy sessions at circa 2-weekly intervals, in their home. The aim of the intervention was to promote mourning in the children and parent and to improve communication between them. The therapists received regular supervision. No intervention was provided for the control group (further information about the study can be found in Appendix Q on CD-ROM). Assessment intervals were yearly and occurred at 1 and 2 years after the intervention. Data was collected using a structured interview. The attrition rate was high in both groups. The findings showed a modest difference in favour of the treatment group but failed to reach statistical significance. A consistent factor associated with good outcomes in both groups was the well being of the surviving parent (see Appendix Q on CD-ROM for further information about the results). The authors highlighted the importance of further research into the needs of bereaved children, factors associated with good outcomes and the evaluation of different interventions (Black & Urbanowicz, 1987).

5.2.2.2 Parental mental illness (depression)

The children of parents who have affective disorders are at increased risk for a number of mental health problems, including depression (Beardslee *et al.*, 2003).

The Preventive Intervention Project is a large-scale efficacy trial of two manual-based cognitive, psychoeducational, preventive interventions conducted in the United States and designed to be used in the public health domain by a variety of professional groups (BEARDSLEE1997). To date, approximately 100 families who have at least one parent diagnosed with an affective disorder and their 8–15-year-old, non-depressed children have been randomly assigned to either a clinician-facilitated or a lecture discussion group. Both interventions were specified in manuals, and provided by trained facilitators who received regular supervision. The clinician-facilitated intervention comprised six to eleven sessions, including separate meetings with parents and children and a family meeting led by parents, focusing on strategies for promoting mental health in the children. Additional telephone contacts or refresher meetings were also provided at 6–9 monthly intervals. The lecture intervention consisted of two group meetings with parents only. Psychoeducational material about mood disorders, and risk and resilience factors were presented to both groups. Both interventions shared the same aims, namely: the reduction of individual and family risk factors and the development of

protective factors in adolescents through changes in parental attitudes and behaviour; increasing parental knowledge about the aetiology of child and adult depression; removing misunderstanding, guilt and blaming by providing information that enabled parents to respond proactively to the effects of the mood disorder on their children and the family (further information about the study can be found in Appendix Q on CD-ROM).

Assessment was carried out pre-intervention, post-intervention, and approximately 12 and 30 months after the end of treatment. Findings have consistently shown that both interventions are associated with positive change in parents and children. Additionally, participants in the clinician-facilitated intervention group report significantly greater levels of assessor-rated and self-reported change, including an overall reduction in internalising symptomatology in children and adolescents (see Appendix Q on CD-ROM for further information about the results).

5.2.2.3 Divorce

Marital conflict, parental separation and divorce have consistently been shown to be associated with higher levels of depression in children and adolescents (Wolchik *et al.*, 2000).

In the USA, Wolchik and colleagues have been involved in a longitudinal study of prevention programmes for divorced families. Families were randomly assigned to a programme for mothers (n = 81), a dual mother-child programme (n = 83) or to a self-study programme (n = 76). The programme for mothers and the mother component of the mother-child programme consisted of eleven group and two individual sessions. Two trained facilitators, who received regular supervision, led them. The focus was on improving the quality of the mother–child relationship, providing education about parental conflict, divorce and the father–child relationship and improving parenting skills. The child programme group met for 11 weeks and there was a conjoint mother-child session. The children were taught skills such as recognising and labelling feelings, relaxation, problem-solving, positive cognitive reframing and challenging common negative appraisals. Mothers and children in the self-study group each received three books and syllabi to guide their reading at 3-weekly intervals (further information about the study can be found in Appendix Q on CD-ROM). The lack of direct involvement with fathers can be viewed as a limitation of the study.

Depressive symptomatology in the children/young people was not focused on specifically, but a reduction in internalising problems was reported for those children and adolescents involved in interventions (see Appendix Q on CD-ROM for further information about the results).

5.2.2.4 Children displaying symptoms of depression

ASARNOW2002 conducted a preliminary treatment development study in the USA. The intervention had been developed and tested using a clinical sample. In this study 88 children at an urban private school were screened for self-reported symptoms of depression using the CDI. Twenty-three of these pupils were subsequently randomly allocated to either an intervention or a waitlist control group. The intervention group participated in ten sessions of a combined CBT and family education intervention. A detailed manual guided each session. The sessions occurred after school, twice a week for 5 weeks and included a family education session. The control group received the intervention after the post-test assessment of the intervention group had been

completed. The 'Stress-Busters' intervention has three distinct components: teaching of generic skills, including problem identification, problem-solving, social skills, goal setting and relaxation techniques and depression-specific interventions; family education; the development of videotape by the children for parents (further information about the study can be found in Appendix Q on CD-ROM).

When compared to children in the control group, children in the intervention group were more likely to show a reduction in depressive symptoms, negative cognitions and maladaptive coping responses to stress (see Appendix Q on CD-ROM for further information about the results). Consumer satisfaction data was examined for the whole sample and all parents rated the family intervention as helpful. However, a sizeable minority (40%) wanted more family sessions. Further research into this area was recommended. There was no indication of how the school was chosen or of how representative of the population it was (Asarnow *et al.*, 2002).

5.2.3 Clinical summary

Despite the evidence to suggest that family interventions might provide helpful preventative strategies, few controlled prevention studies of depression in children and young people have been undertaken to date (Shochet & Dadds, 1997; Beardslee *et al.*, 2003). Those that do exist have mainly originated from the USA and therefore care needs to be taken when generalising to a different cultural context, despite similarities in the cultures involved.

From the limited evidence available, it would appear that preventative intervention for depression in children and young people that target psychosocial risk factors in children, young people and their families may be beneficial.

5.3 Social/environmental interventions

5.3.1 Introduction

The onset of depression tends to be a consequence of multiple rather than a single predisposing factor. Some of these factors are chronically present in the social and broader environment; others arise less predictably in relationships with family or friends and may recur over time. Children and young people are inherently dependent on their social environment, generally mediated by the family. Most will also spend a large part of their time in the school environment (Rutter *et al*., 1979). There is some evidence that difficulties encountered in this environment, like bullying, can predispose an individual to depression. Predisposing factors in the wider environment include poor housing, poverty, unemployment (either of a parent or of the young person), exposure to pervasive neighbourhood violence, and disadvantage and victimisation associated with sexual orientation, racism and membership of a black and minority ethnic group, especially if this is also associated with refugee or asylum-seeker status.

5.3.2 Current practice

Though not specifically targeted at preventing or alleviating depression, government-sponsored programmes like 'Head Start' in the USA and 'Sure Start' in the UK have targeted factors in local communities that prevent or inhibit social inclusion, social and educational development, and the maintenance of emotional and physical good health. Though 'Sure Start' programmes are aimed at children under four, who are outside the

scope of this guideline, they are concerned with long-term outcomes and prevention and their targets include risk factors for depression like maternal post-natal depression, parental ill-health, poverty and a lack of employment opportunities. The long-term effectiveness of these interventions has not been studied yet.

Epidemiological studies show that many adolescents and some children in the community who are depressed remain undetected (Angold & Costello, 2001). Depression may not be recognised as such by those working with the child or young person (teachers and school support staff, youth workers, sports coaches, social workers and so on, who may be employed by statutory agencies in primary healthcare, social care, education, or in the voluntary sector. Their primary concern may be a behavioural manifestation associated with the depression, like substance misuse, delinquency, bullying or child abuse. Shame and fear of blame may make it hard to assess this in such settings. Interventions may not have input from CAMHS professionals.

All schools must have written anti-bullying policies, and may employ a range of anti-bullying strategies and approaches based on evidence from project-based studies (for example, DfES, 2002). In addition some schools have introduced peer mentoring and mediation training programmes for pupils in primary schools, such as 'Circle Time' (Curry & Bromfield, 1994) or a 'Circle of Friends' (Newton *et al.*, 1996), to improve an individual child's social integration. This may be the best help that is available, though at the moment there seems little evidence, aside from anti-bullying interventions, as to what may be more or less effective with depression. Moreover, universal preventative interventions may have a large potential benefit for the wider population but smaller benefits for individuals (Offord *et al.*, 1998).

5.3.3 Definition and aim of the intervention

Social and environmental interventions seek to influence depression through bringing about or facilitating changes in this environment in order to reduce or eliminate known risk factors and/or enhancing beneficial factors. This may aim to prevent or alleviate existing depressive mood or symptoms, targeting an individual or a group.

5.3.4 Narrative review

A number of studies were found from the US and Canada indicating that environmental and social factors contribute to depression. No studies were found of specific social or environmental interventions that demonstrated a direct effect on preventing or reducing depression. However, a number of studies from Britain and elsewhere of interventions in educational settings, particularly with regard to bullying, suggest positive outcomes in terms of general improvement in emotional well-being, and in some cases more specifically with internalising disorders, including depression.

5.3.4.1 Peer friendship networks

No studies of interventions were found that demonstrate that peer support networks prevent or alleviate depression and its effects, though there is self-report evidence of effectiveness in reducing depression. Bao and colleagues (2000) in the US interviewed 602 homeless and runaway adolescents. Supportive contact with family members and peers helped to reduce reported depressive symptoms, while association with peers with a history of deviance increased them. Cornwell (2003) studied a nationally representative sample of 11,835 US adolescents from the National Longitudinal Study of

Adolescent Health, using an index of questions from the CES-D scale to measure depression. The results of the study suggested that preventing a falling off of peer and parental support may help reduce a potential intensification of depressive symptoms. Downs and Rose (1991) concluded that peer-group affiliation reduced reported psychosocial problems in adolescents in a hospital-based treatment programme providing acute crisis intervention for alcohol or drug intoxication. This led them to advocate programmes to increase the individual's involvement in school activities through identifying interests and improving skills, and to encourage affiliation to a more positively labelled peer group. Ezzell and colleagues (2000) found peer and family support to be particularly important in reducing internalising symptoms in a small sample of children aged 6–14 years who were depressed after being physically abused. The children specifically mentioned support from a coach, parents' friends and therapists as important to them.

5.3.4.2 Social networks and neighbourhood factors

Perez-Smith and colleagues (2002) investigated the value of social networks, interviewing 48 adolescents presenting to a paediatric emergency department following a suicide attempt. Their findings indicate that living in a neighbourhood with what they defined as weak social networks (i.e. high male-to-female ratios and adult-to-child ratios) led to higher levels of self-reported hopelessness. Caughy and colleagues (2001) concluded that in amongst a socially and economically representative cross-section of African Americans in an inner city, those children in wealthier neighbourhoods whose parents reported knowing few neighbours had higher levels of internalising problems such as anxiety and depression, whereas in poorer neighbourhoods a parent knowing fewer neighbours seemed to protect children against internalising problems. The study did not specifically screen for depression. Caution should be used in any attempt to relate these results to the situation of black and minority ethnic children in the UK.

5.3.4.3 The educational environment

A number of studies have demonstrated the adverse effect on the mental health of children and young people of bullying in its various manifestations, including: direct bullying through physical aggression; verbal bullying and intimidation; and indirect bullying through social isolation, and intentional exclusion from the group (Olweus, 1994; Kumpulainen *et al*., 1998; Salmon *et al.*, 2000). Olweus (1993) also reports that boys who were victimized at school aged 13–16 years were more likely to show depressive tendencies at age 23. Hawker and Boulton's (2000) meta-analysis of research on peer victimization and psychosocial maladjustment found a positive association between bullying and victimisation and depression, either self- or peer-assessed. Salmon and colleagues (2000) studied a relatively small sample of adolescent psychiatric inpatients and outpatients. Among outpatients, depression was more often diagnosed in the group with a prior history of being bullied (71.4% compared with 25% of other referrals). This was less evident in the inpatients, though bullying was thought by staff to be an important factor in the psychiatric presentation of 35% of inpatients and 27% of outpatients.

Though not specifically addressing depression, studies have indicated that school-based anti-bullying intervention programmes can substantially reduce bullying. Olweus (1993) studied an anti-bullying intervention in Norwegian schools (28 elementary and 14 junior high). The intervention consisted of providing booklets for teachers, a folder for parents, a videotape, and an anonymous self-report questionnaire about experience of bullying

and being bullied, administered to 2,500 boys and girls with an age range of 11–14 years. Parent circles and teacher groups were introduced, and there was encouragement to produce class rules for bullying. The project assessed the incidence of bullying at three time points between 1983–5, immediately prior to the intervention and at 1 and 2 years afterwards. Over the 2 years, rates of bullying fell by approximately 50%, and the effects were more marked at 2-year follow-up. This was true for boys and girls. Olweus also reported a marked improvement in the overall social climate of the school, more positive social relationships, improved order and discipline, and an increase in reported positive attitudes to school. However a later Norwegian study (Olweus, 1994) over a 3-year period (1983–6) that attempted to replicate this intervention through monitoring 37 Norwegian schools found no clear evidence of a decrease in rates of bullying over this period, and even a small increase in some measures of bullying. Better results and a modest decline in measures of bullying were reported in schools that had made use of the packs and materials provided.

Reviewing these Norwegian studies, Smith and Sharp (1994) hypothesised that the difference may have reflected the relative intensity of professional input. They took this into account in designing their applied research project, the Department For Education Sheffield Anti-Bullying Project. The aim was that project outcomes would be replicable in schools nationwide. Support from the project team was minimised in order to reduce the effect of an energetic and enthusiastic research team. They also acknowledged the virtual impossibility of standardising an intervention in a school system that was undergoing considerable structural change, and that generalisation from the results was to an extent limited by effectively having only two comparison schools.

The assessment of outcome effectiveness was based on a follow-up 2 years later in 1992 of an earlier survey of levels of bullying in 24 project schools. Twenty-three of the original 24 schools opted into an intervention study. All of the schools implemented a Whole School Policy on bullying and in addition chose from various other interventions. These included curriculum work (e.g. using video, drama and literature); playground interventions (for example, specific training for lunchtime supervisors, improving the playground environment, and so on); and work with individuals and small groups (which included assertiveness training and a method of shared concern developed by Pika). No school opted to introduce 'bullying courts'. Workshops were provided on specific interventions, and teachers were offered training by educational psychologists on assertiveness training. They used questionnaires and interviews to assess the nature and extent of bullying behaviour, the degree to which staff were involved, perceptions of the effectiveness of the Whole School Policy, and the extent of pupil involvement in and awareness of the project. The results are suggestive of a positive impact of the interventions, though the nature of this varied between primary and secondary schools. The average reported reductions in levels of bullying are less substantial than those reported by Olweus. They noted a significant relationship between the level of input and outcome: higher reductions in bullying were recorded in schools which put more effort into the interventions.

Project schools showed a significant increase (averaging 15% in primary schools, though there was no significant change in secondary schools) in pupils who had not been bullied and a significant decrease in the frequency with which pupils were bullied. There was an increase in the number of pupils reporting that they hadn't bullied others

and a reduction in reported frequency of bullying and in the number of pupils who were thought by class-mates to be involved in bullying others. This averaged 12% for both primary and secondary schools, though only the reduction in frequency was significant across all schools. There was an average 9% increase in pupils stating that they would not participate in bullying, which was more marked in secondary schools. There was no significant change in pupils' perception of the role of adults but a rise of approximately 30% in secondary schools in the number of pupils who would tell someone, especially a teacher, with only a modest increase in primary schools.

The main reported impact on the likelihood and frequency of bullying was in primary schools. Though the effects were smaller in secondary schools, they registered significant increases in the proportion of victims of bullying who would seek help by, for instance, telling a teacher. Whole School Policies were found to be most effective, though there is a need for periodic monitoring and evaluation. The anti-bullying pack produced for schools by the Department for Education and Skills (DfES, 2002) was based on lessons learned from this project.

Follow-up studies (Smith & Shu, 2000) support the success of school-based interventions in reducing reported rates of being bullied or bullying others, but report greater success in reducing bullying by boys than by girls. They hypothesized that this might reflect differences in the nature of bullying according to gender, with forms of less visible indirect bullying like social isolation and spreading of rumours having been found to be more prevalent amongst girls. Salmon and collegaues (1998) also found that the introduction of policies on bullying on the 904 pupils aged 12–17 years in two secondary schools had more of an impact on the direct bullying characteristics of boys than on the indirect bullying more common among girls. This seems to support Rigby's (1999) finding in a study of 819 male and female Australian secondary pupils that bullying impacted on the physical health of both genders, but had a more marked impact on the mental health of girls, which he hypothesized was also due to differences between the genders in prevalent forms of bullying.

A number of studies consider interventions with a broader remit which may still have relevance to depression. For example the LIFT programme (Linking the Interests of Families and Teachers) aimed to reduce the prevalence of conduct disorders in schools through providing parent training, classroom-based social skills training, playground behavioural interventions and improving school-parent communication. The overall intervention was found to have significant effects on physical aggression in the playground, maternal aversive behaviour and child behaviour in the classroom (Reid *et al*., 1999). Two studies (Domitrovich & Greenberg, 2000, and Weissberg *et al*., 2003) make suggestions as to best practice in school-based interventions. Interventions should aim to change the school and family context, not just the individual child, and must be culturally appropriate. The findings support the importance of ensuring the active involvement of the head teacher, and that programmes should be over several years rather than brief interventions. Locally appropriate delivery programmes need to incorporate whatever evidence-based practice there is, and to be implemented with sustainable training and support.

Promoting Alternative Thinking Strategies (PATHS) (Greenberg & Kusche, 1998) is a whole-school targeted programme for primary age pupils aiming to improve social and emotional competence. RCTs were carried out in a number of schools, and at 2-year

follow-up there were significant differences on teacher- and self-report of depressive and conduct problems. A multi-site replication using a shorter version within the Fast Track (CPPRG, 2002) programme suggests that the quality of implementation is a key predictor of how teachers and peers assess outcome.

Pritchard (2001) reported considerable success in resolving child and family problems and improving the ethos of the school in a 3-year school-based social work support service, staffed by an experienced project social worker with a background in education social work, and two project teachers. This was shown to positively affect educational achievement, truancy and exclusion rates, all of which have been associated with depression. The project recorded severe personal and social problems affecting children in the target schools (a primary and a secondary school, with comparison schools selected as controls). It specifically focused on reduction of anti-social behaviour and delinquency. Though there was no screening for depression or other mental health problems, and consequently no evaluation of effectiveness of the intervention in this respect, it is likely that these were present in the targeted population. Fifty-four percent of referred problems were described as behavioural disorders and 29% 'neurotic/anxiety' difficulties. There were many potential risk factors present for depression. For example, 20% of referrals were child protection cases, 10% of parents had mental health problems and 20% medical and chronic health disorders, and a majority of the fathers involved were unemployed. Counselling and group work were provided for children and families using a model drawing on a CBT approach. Using what is described as an integrated psycho-socio-educational approach, consultation and support were provided for teachers, and community and school networks were developed to facilitate mutual family support and inter-agency collaboration.

Galaif and colleagues (2003) found that depression could be predicted from the interaction between perceived stress and methods of coping with anger in a non-intervention-based study of 646 US continuation high school students. They suggest school-based programmes incorporating anger management techniques and skills into the curriculum. Dumont and Provost (1999) studied a normative sample of 297 adolescents aged 14–16 years from the same school in Quebec who were experiencing depression and repetitive stress which they called 'daily hassles'. Depression was assessed using the Beck Depression Inventory. Though no intervention was studied, their findings suggest that social support and social activities help build self-esteem, coping strategies and resilience to stress and depression.

Naylor and Cowie (1999) administered a self-report questionnaire to teachers and 11- and 13-year-old pupils to investigate the effectiveness of peer support schemes in reducing bullying in 51 UK secondary schools where such schemes had been in place for at least 1 year. The study does not differentiate between types of peer support. The presence of a peer support scheme did not lead to a reduction in reported bullying behaviour, although there was evidence that bullying victims are more likely to approach someone for help (though not necessarily a peer supporter). Boys were more reluctant to support the scheme than were girls. A 2-year follow-up study by Cowie and colleagues (2002) using semi-structured interviews in 35 of the original schools that participated found a greater acceptance, awareness and approval of peer support schemes. The gender difference persisted in the younger group but not in the older. Though fewer bullied pupils reported using the scheme, fewer had told no-one about the bullying and more had told someone else. The greatest reported benefit in both studies was to the peer supporters themselves and through them to an improved school ethos.

Finally, it should not be forgotten that a child or young person who is depressed may be less able to act independently or make decisions confidently. Depression, especially when severe, is likely to interfere with a child/young person's ordinary level of personal autonomy. It is very important, therefore, that the ethics of consent, confidentiality and the need to 'foster' the growing person's autonomy, are properly taken into account when assessing or treating children/young people with depression, so as to minimise the impairment that may result from the disorder.

5.3.5 Clinical summary

There is evidence that a range of social and environmental factors can impact on the mental health of children and young people, including peer group networks, parental employment status, financial issues, neighbourhood factors and levels of bullying and other school-based problems. There is less good evidence of direct relationships between such factors and depression in children, as few studies have looked for this. Further, systematic review found no controlled trials that specifically looked at social and environmental interventions to prevent or treat depressive disorder in children and young people. Nevertheless, it is important to address ethical issues with the aim of fostering the autonomy of the child/young person to improve self-reliance.

There is however evidence from British and European studies of bullying as a predisposing factor for and cause of depression; and also of effectiveness of some anti-bullying interventions in schools. Aside from anti-bullying interventions in schools, many of the studies that do exist have originated from the USA, and these have not evaluated actual interventions. Care also needs to be taken when generalising to a different cultural context, despite similarities in the cultures involved.

From the limited evidence available, it would appear that social and environmental intervention for depression in children and adolescents, including those that target psychosocial risk factors in children, adolescents and their families may be beneficial. In cases where depression remains undiagnosed, such an intervention may be the only one that is used.

5.4 Clinical practice recommendations

5.4.1 Self-help

5.4.1.1 In the assessment of a child or young person with depression, healthcare professionals should always ask the patient, and be prepared to give advice, about self-help materials or other methods used or considered potentially helpful by the patient or their parent(s) or carer(s). This may include educational leaflets, helplines, self-diagnosis tools, peer, social and family support groups, complementary therapies or religious and spiritual groups. (GPP)

5.4.1.2 Healthcare professionals should only recommend self-help materials or strategies as part of a supported and planned package of care. (GPP)

5.4.1.3 A child or young person with depression should be offered advice on the benefits of regular exercise and encouraged to consider following a structured and supervised exercise programme of typically up to three

sessions per week of moderate duration (45 minutes to 1 hour) for between 10 and 12 weeks. (C)

5.4.1.4 A child or young person with depression should be offered advice about sleep hygiene and anxiety management. (C)

5.4.1.5 A child or young person with depression should be offered advice about nutrition and the benefits of a balanced diet. (GPP)

5.4.2 Family support/parental education

5.4.2.1 When assessing a child or young person with depression, healthcare professionals should routinely consider, and record in the patient's notes, potential comorbidities, and the social, educational and family context for the patient and family members, including the quality of interpersonal relationships, both between the patient and other family members and with their friends and peers. (GPP)

5.4.2.2 In the assessment of a child or young person with depression, healthcare professionals should always ask the patient and their parent(s) or carer(s) directly about the young person's alcohol and drug use, any experience of being bullied or abused, self-harm and ideas about suicide. A young person should be offered the opportunity to discuss these issues initially in private. (GPP)

5.4.2.3 If a child or young person with depression presents acutely having self-harmed, the immediate management should follow the NICE guideline 'Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care' as this applies to children and young people, paying particular attention to the guidance on consent and capacity. Further management should then follow this depression guideline. (GPP)

5.4.2.4 When a child or young person has been diagnosed with depression, consideration should be given to the possibility of parental depression, parental substance misuse, or other mental health problems and associated problems of living, as these are often associated with depression in a child or young person and, if untreated, may have a negative impact on the success of treatment offered to the child or young person. (GPP)

5.4.2.5 In the assessment and treatment of depression in children and young people, special attention should be paid to the issues of:

- confidentiality
- the young person's consent (including Gillick competence)
- parental consent
- child protection

- the use of the Mental Health Act in young people
- the use of the Children Act. (GPP)

5.4.3 Social/environmental interventions

5.4.3.1 When bullying is considered to be a factor in a child or young person's depression, CAMHS, primary care and educational professionals should work collaboratively to prevent bullying and to develop effective antibullying strategies. (C)

6 Psychological treatment of depression in children and young people

6.1 Introduction

The psychological treatment of depression in children and young people is dissimilar from that provided for depressed adults. Although, as with physical treatments for depression, there has been some extrapolation from approaches used for adults (for example cognitive behavioural therapy [CBT] and psychodynamic therapy), in routine practice these formal individual therapies are not the most common psychological approaches. Whereas adults with depression are often treated for the disorder specifically, children with depression are often not thought of as 'having' depression but as affected by a set of emotional, behavioural, learning, relationship and family problems which need to be considered together, and may still need to be addressed together, even if depression in the child is a primary concern.

Thus, psychological therapies for depression in children and young people may not be thought about as distinct from working with children, adolescents and families with a wide range of psychosocial difficulties. This is probably especially true with pre-adolescent children, but for adolescents as well depression is very likely to be seen as a sign of a more complicated situation, or result of earlier stresses within a system (the family or school for example).

Nevertheless, as adolescents move towards adult independence (or fail to do so), it is more likely that therapies designed for adults will be thought to be appropriate and extended to these young people. It may be for this reason, as well as because depression in children and young people is most prevalent in adolescence, that the studies reviewed here have generally been conducted with young people of secondary school age, and our conclusions **should not be assumed to apply to younger children**, without further investigation.

Children rarely initiate mental health assessment and treatment although adolescents may seek help for emotional difficulties in a wide variety of ways (see Chapter 5). While many clinically depressed adults recognise that they are depressed (or at least that they are ill) and seek treatment, both would be rare in children and adolescents. At a mild level, children are highly unlikely to be referred, unless it affects their behaviour in some obvious way (e.g. self-harm, withdrawn or aggressive behaviour at school, or failing academic performance). Depression in children and young people commonly presents as recurrent and unexplained physical symptoms, which may be difficult to recognise as depression, even for the healthcare professionals consulted (e.g. a GP, school nurse, paediatrician). Even when they recognise the underlying problem, parents, child, teachers and others involved may well find it difficult to accept the need for psychological or psychiatric treatment, not uncommonly because of feelings of anxiety, anger and shame, or indeed because of stigma and lack of knowledge about mental health problems generally.

It is important, therefore, to note that the recognition of depression, and the likelihood of children or young people receiving effective treatment and care, is mediated through the differing perceptions and reactions of parents, health and non-health professionals already involved in the child's life, the children/young people themselves and specialist mental healthcare professionals. It is perhaps no surprise that in this context, many children and young people who are depressed have a tendency to think that they ***are*** the problem, rather than thinking that they ***have*** a problem with which they may be able to get help.

6.2 Psychological therapies

6.2.1 Introduction

Psychological therapies for depression in children and young people include a number of approaches, involving different activities, people and amounts of time, and different theoretical assumptions. Treatment may, for example, involve talking with the child, and perhaps others in the family, to clarify the reasons for the child's unhappiness, withdrawal and other symptoms, with the aim of recognising possible factors (e.g. bereavement, parental mental ill health, bullying) which may be linked to the child's depression. Alternatively it may be focused on identifying roles and communication patterns within the family, on changing the child's depressed behaviour (e.g. staying in bed all day, dropping out of school, self-neglect, social isolation), or on enabling the child to find new ways of expression and communication such as through art therapy.

6.2.2 Current practice

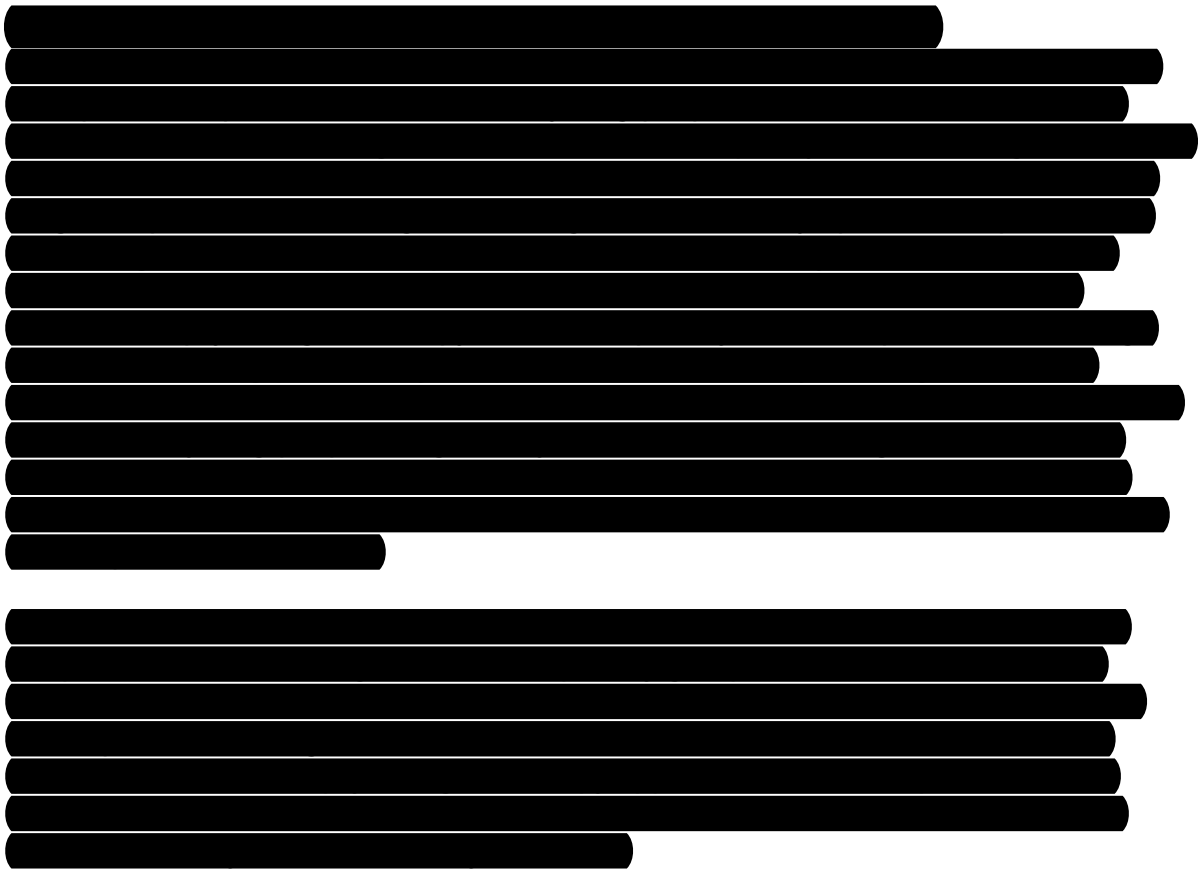
The current system of NHS CAMHS provision is described in Chapter 8. The wider context of non-NHS services, together with self-help resources, is described in Chapter 5.

Within the NHS, depression in a young person may first be noticed by one of a range of primary care and community professionals, including GPs, practice nurses, counsellors, school nurses, community paediatricians. Sometimes these professionals may offer treatment for the depression, particularly if it is not severe and/or it is in the context of long-term physical illness. Some depressed children and young people will be referred to CAMHS. Nevertheless, it is estimated that the majority of children and young people with depression will not be recognised as such and will not, therefore, receive any specific help (Andrews *et al.*, 2002; Coyle *et al*., 2003).

When a child/young person with depression is referred to CAMHS, whether the first-line treatment offered will be physical or psychological varies considerably. Where the initial approach is social/psychological, this is likely to begin as a generic approach, involving clarification of the problem with the family and child, and locating the child's depression within a wider psychosocial context. Only a small proportion of children in most services will be referred for a specific psychological intervention, such as CBT, individual child psychotherapy or family therapy. Most cases will thus be treated with a psychological approach, involving elaboration and formulation of the problem, which has not been systematically evaluated for treatment efficacy.

A very small proportion of depressed young people may be so severely self-harming or incapacitated that they will be admitted to inpatient adolescent units. Here, it is more

likely that a young person would receive a formal psychological therapy, such as those evaluated in outcome studies. In addition, they would be more likely to receive a form of group therapy, in addition to care within a milieu which provides intensive adult supervision and monitoring of physical behaviour and safety.



6.2.4 Research limitations

In the early years of this research, it was rare for referred children to be studied; such outcome research as there was, was confined to community samples of young people with sub-clinical levels of depressed mood, or clinically depressed young people who were recruited through advertising or screening of large non-referred samples. There is evidence that children who are referred to CAMHS show more complex and entrenched sets of problems, not simply comorbid psychiatric disorders but what may be chronic problems in their social and academic functioning, and psychiatric and social problems in their parents and families (e.g. Hammen *et al*., 1999).

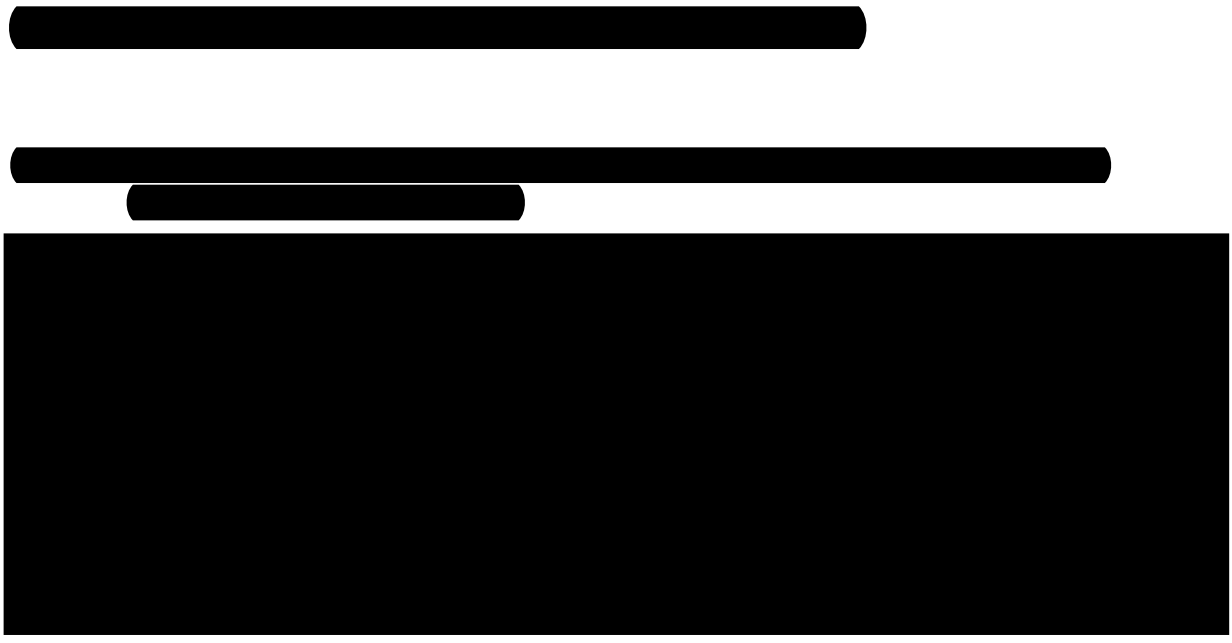
There has, however, been a gradual move in recent years to recruit 'real life' clinical samples, and to include children and young people with comorbid diagnoses in the studies. These changes introduce new practical problems, such as the need for large sample sizes (e.g. to examine the impact of comorbid diagnoses), as well as difficulties of interpretation. Nevertheless, there is an obvious necessity to increase the external validity (generalisability) of studies' findings.

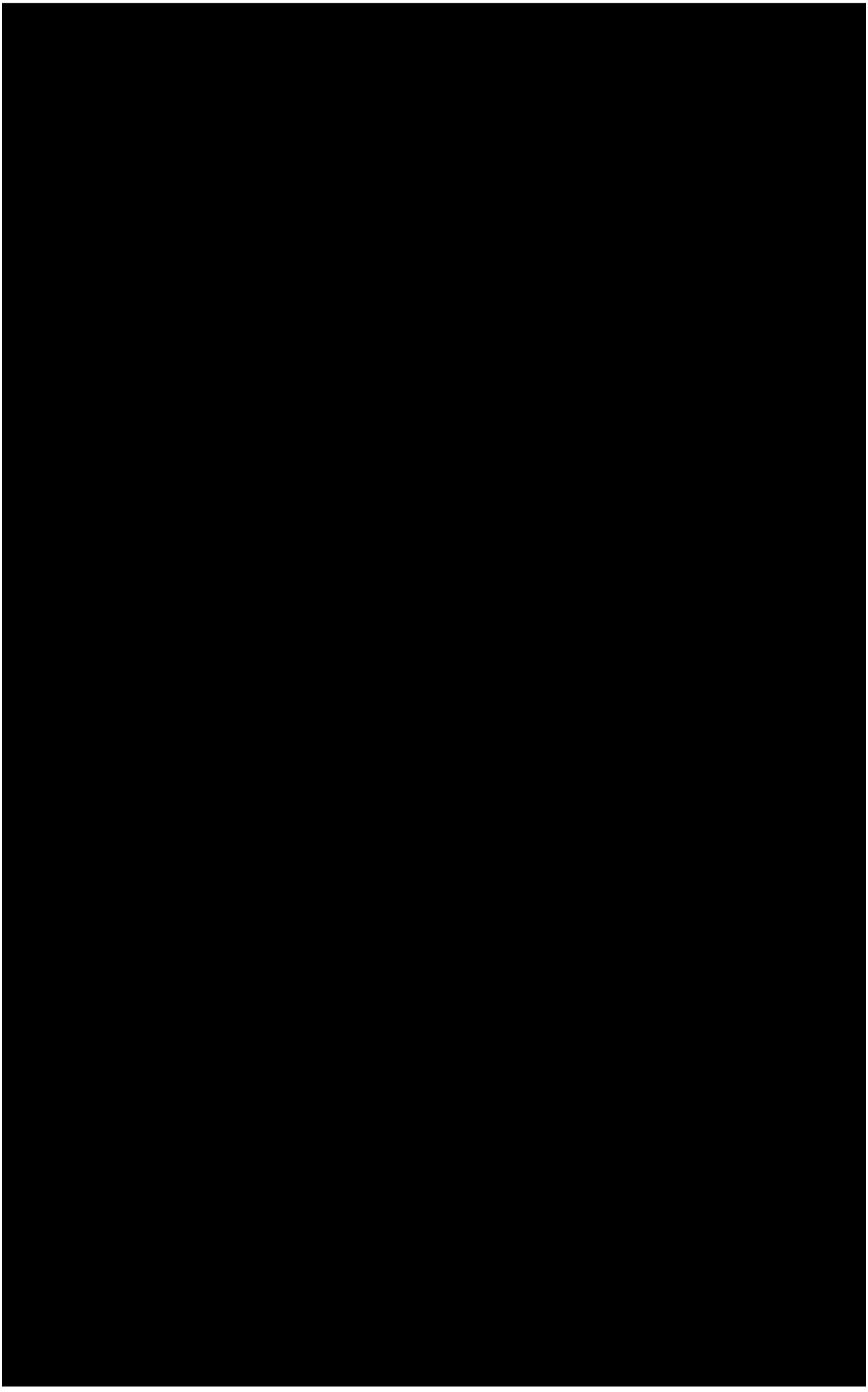
The current review includes studies of both referred and recruited samples. We also include studies with samples defined by depression symptom checklists as opposed to

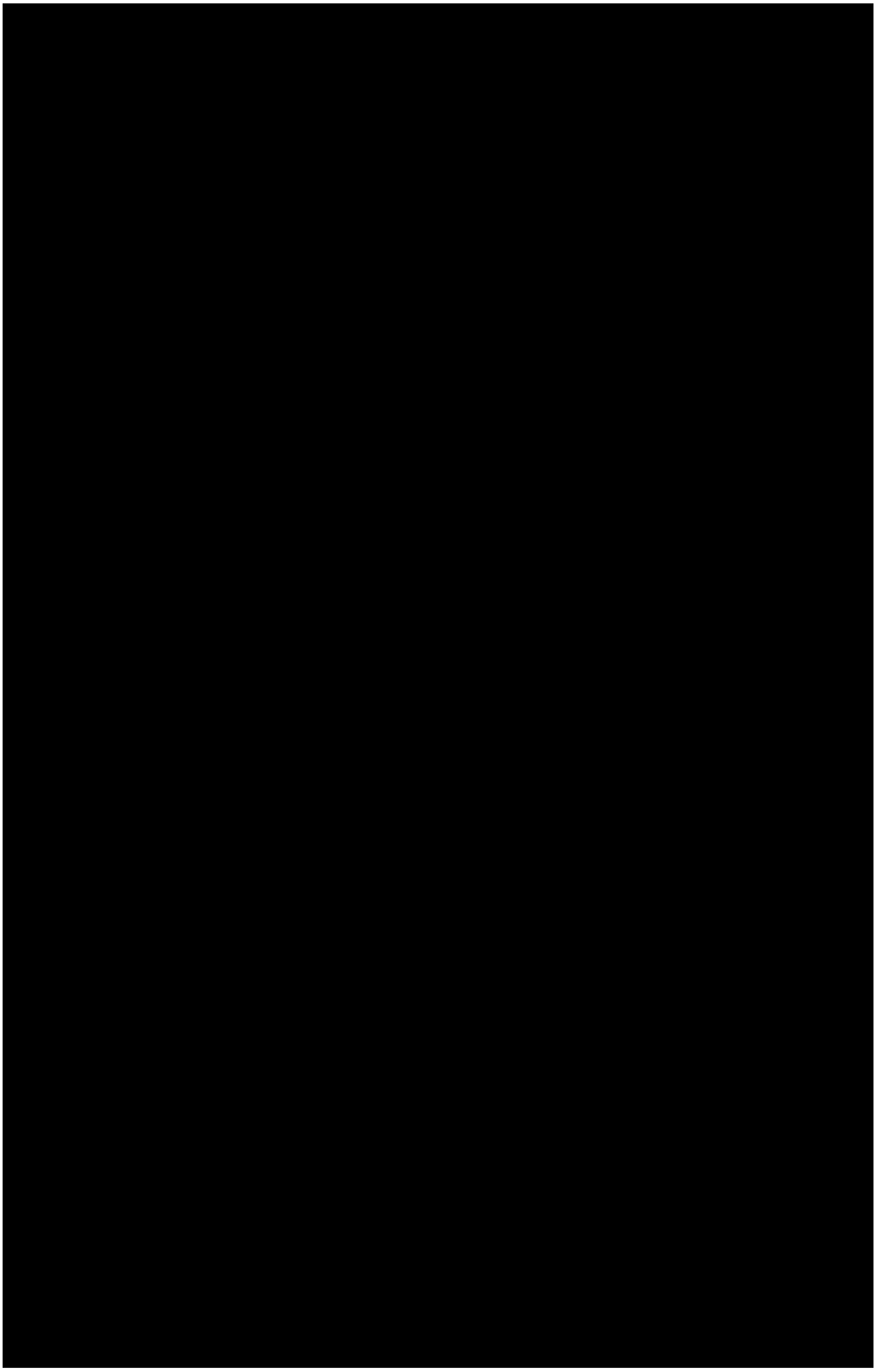
clinical diagnosis. Both factors need to be borne in mind in interpreting the research findings for application to NHS patients presenting with diagnosable levels of depression.

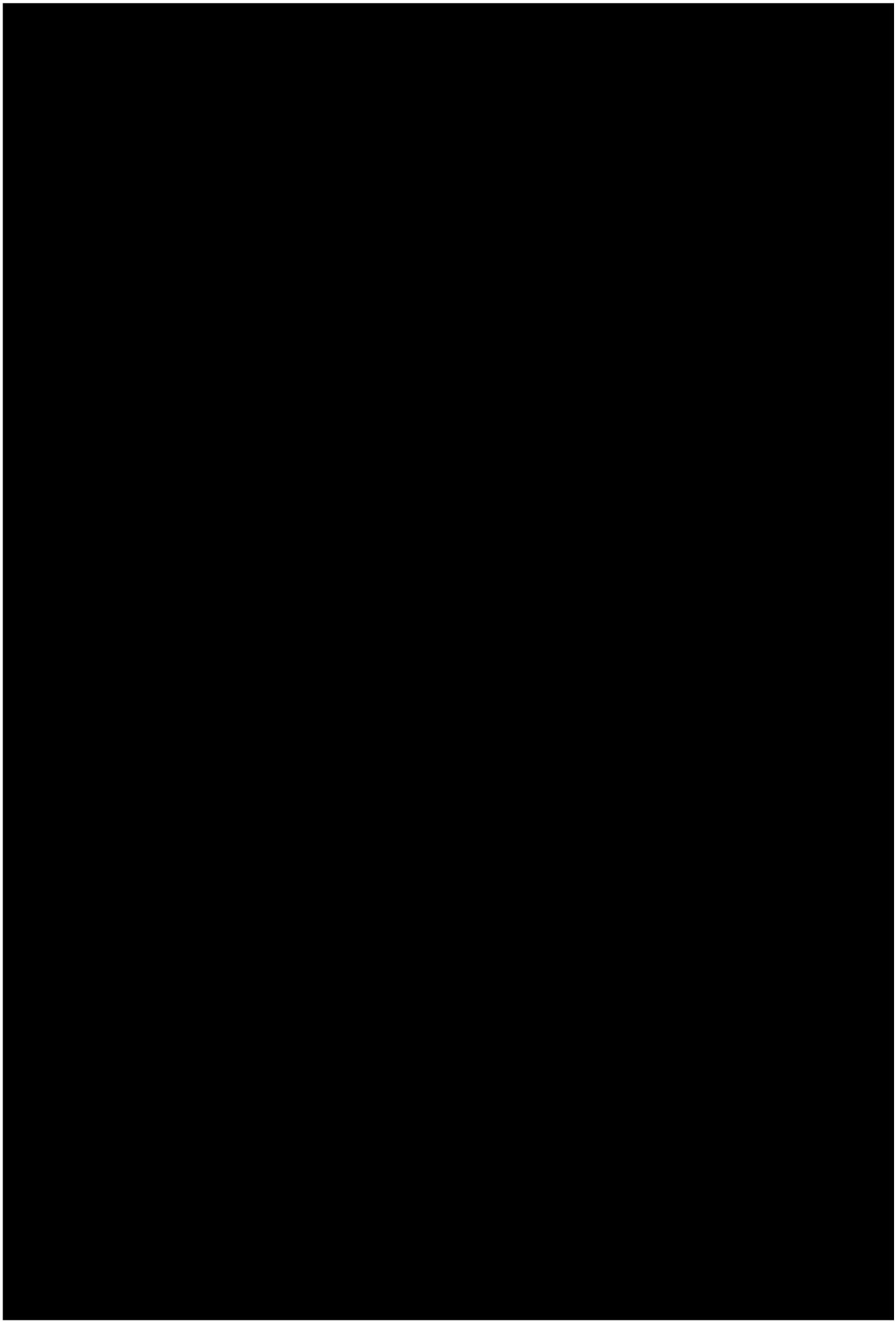
Finally, a significant limitation within the parameters of this guideline is that some important studies have not selected their sample, or reported on outcomes, in terms of depression, but have looked at the effectiveness of a treatment approach across the range of disorders and comorbid conditions that present to the service (Fonagy *et al*., 2002). For example, a psychotherapy service that treats many depressed young people and collects outcome data on internalising symptomatology cannot be included because the data are not depression-specific (Baruch *et al.*, 1998; Baruch *et al.*, 1999). Evaluations of services currently need to be carried out in ways that make reporting possible in terms of diagnoses or disorder-specific symptom scales, if their outcomes are to be included in diagnosis-based guidelines. Alternatively – and probably more appropriately, given the way that services are provided to children and young people guidelines could address treatment outcomes across groups of related disorders, in this case across internalising disorders (the range of anxiety and depressive disorders and their combinations) as opposed to depression in isolation. However, that would require a shift in research culture, away from the medical model of seeking the most effective treatment for a DSM illness category, towards the biopsychosocial model in which formulation is expected to be complex, and treatment assumed to be broad-based, to fit the multiple causative and mediating factors which impinge on children's emotional and social development and current functioning.

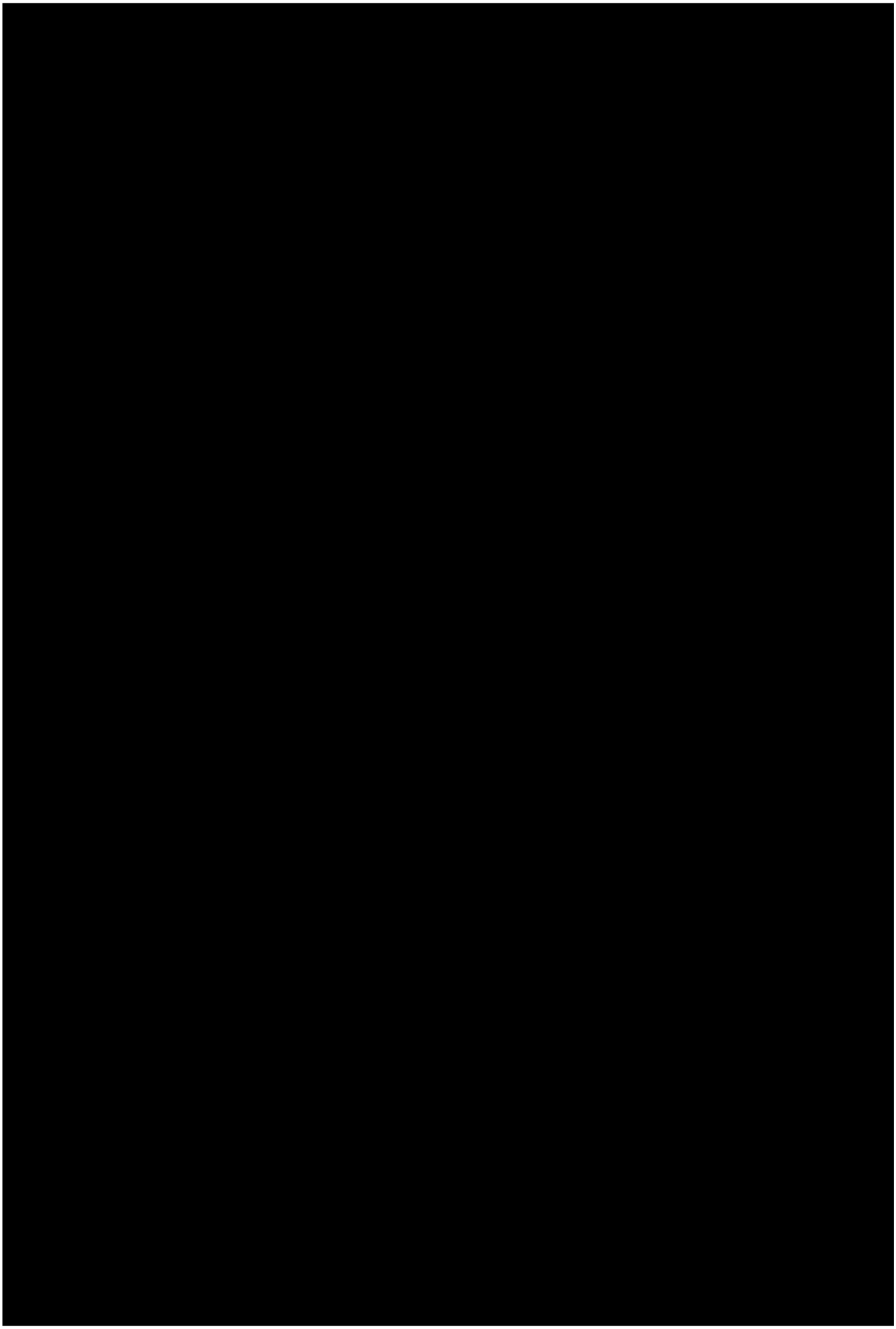
Future research needs more closely to address the needs of NHS healthcare professionals for guidance on treatment choice. It is positive that the culture of research on psychological therapy for children and young people has moved somewhat closer to clinical reality, in its focus on multimodal/multisystemic therapies and developing therapies that can be successfully applied outside the university clinic. The next step may be to make the research more relevant to CAMHS professionals who do not tend to think of the child in isolation from his or her social context, or use a diagnostic category as the basis for treatment choice.

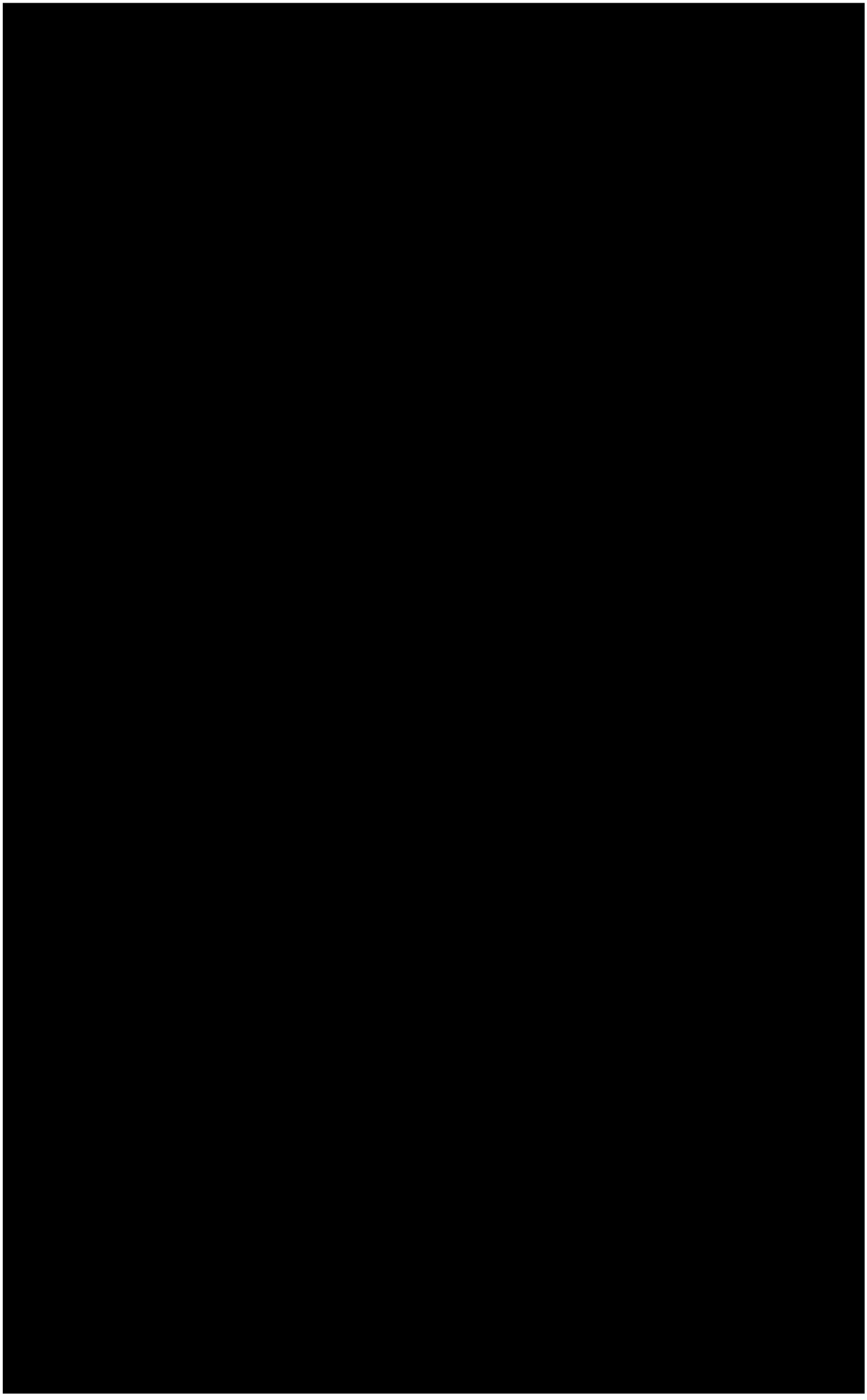


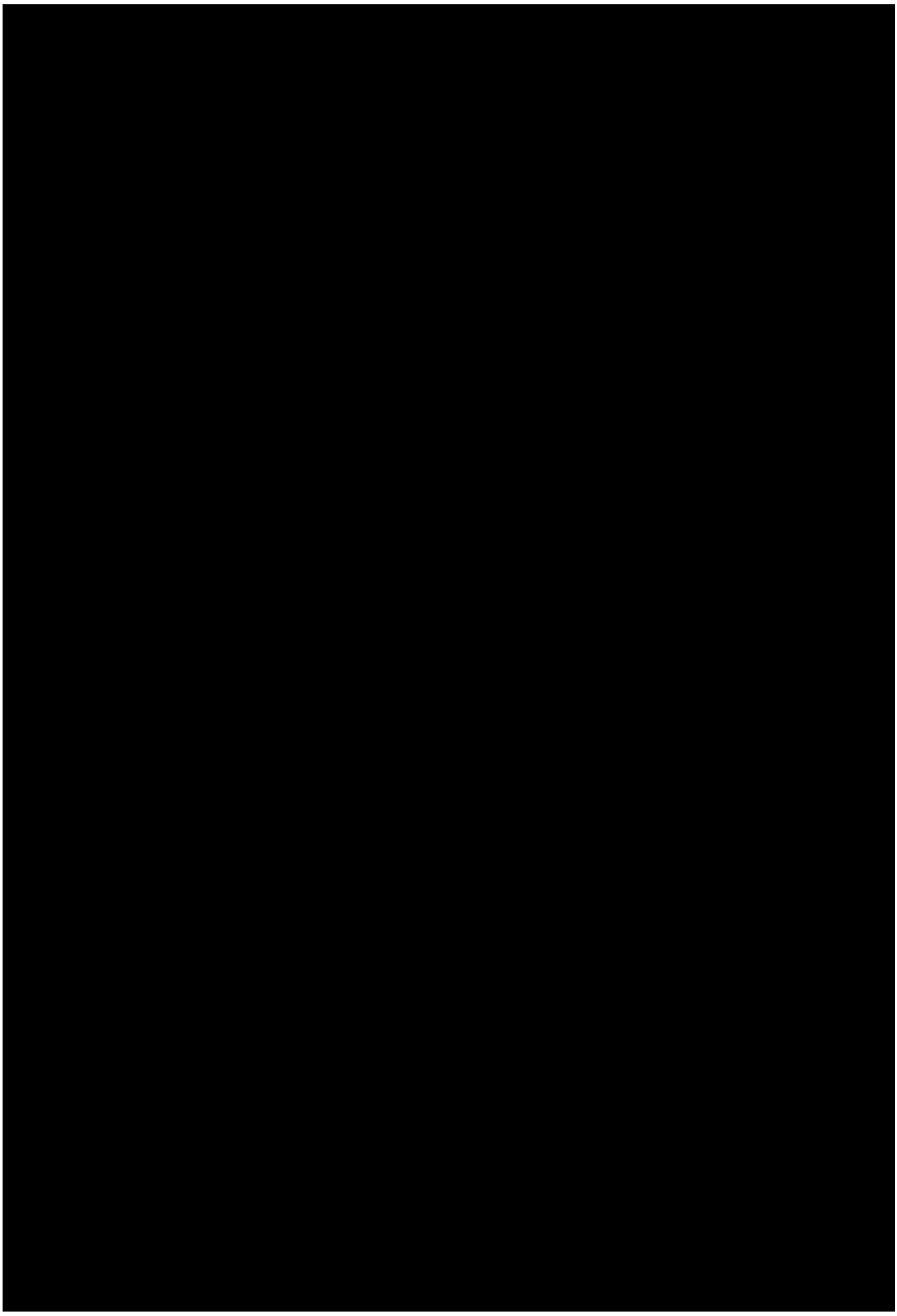


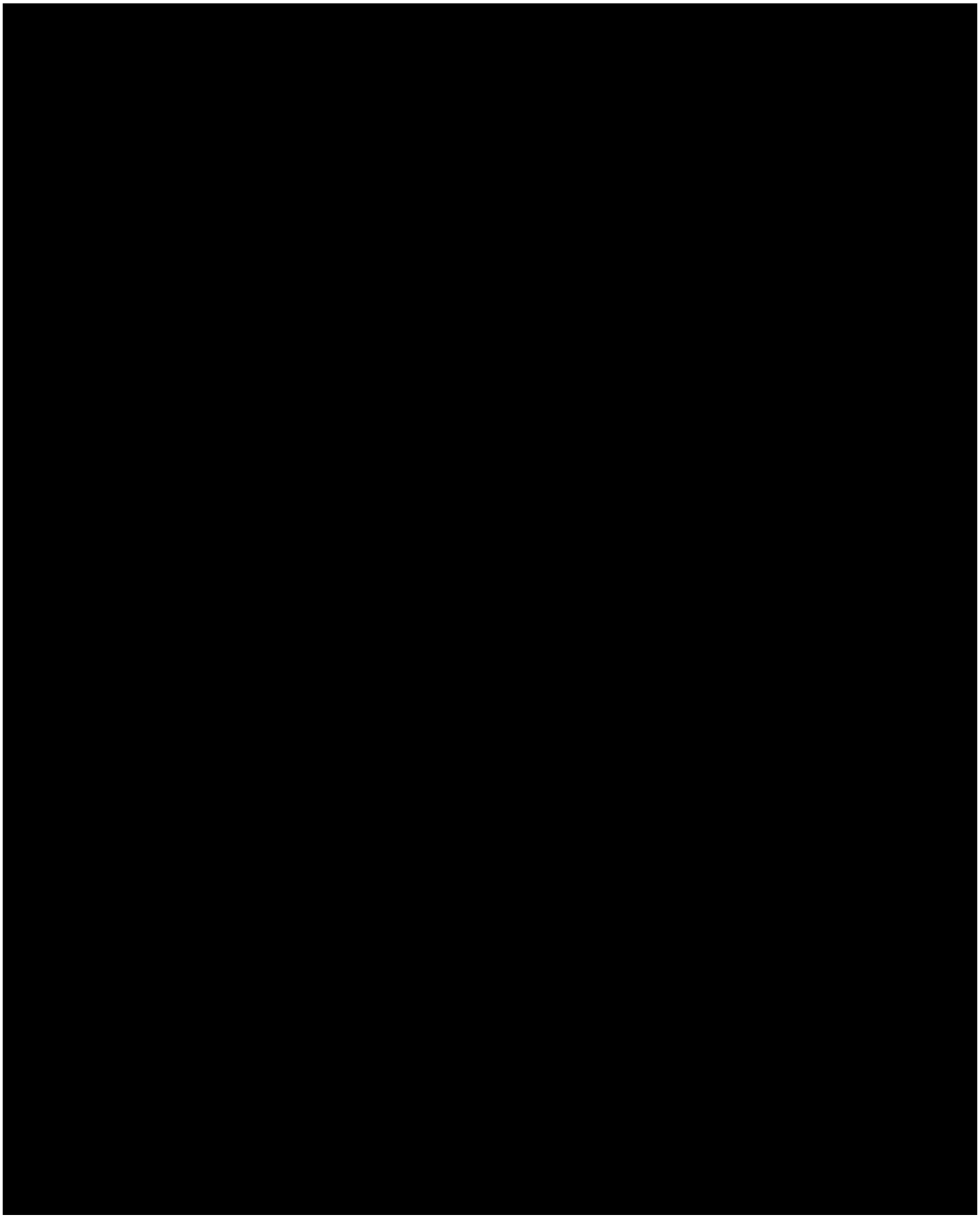


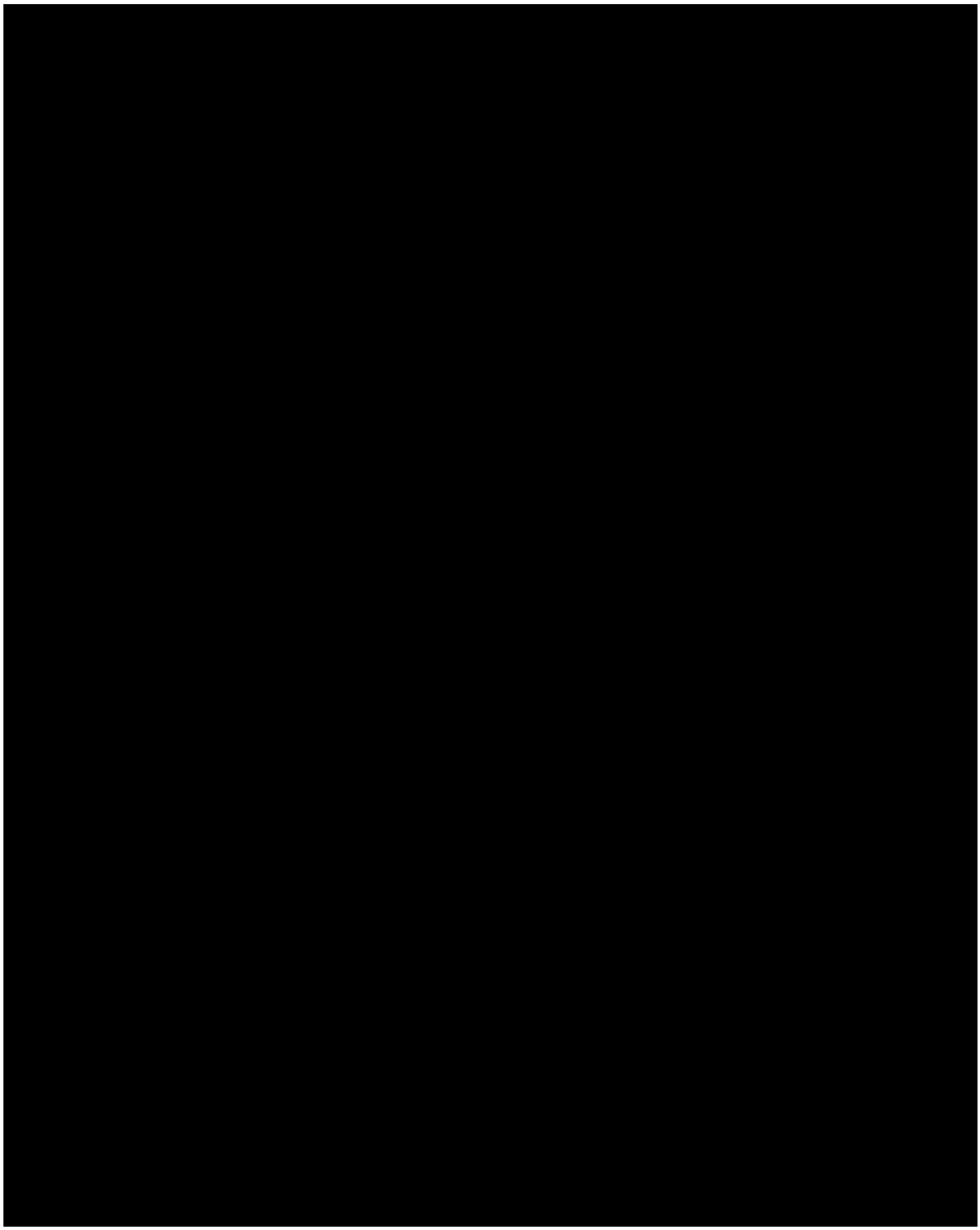


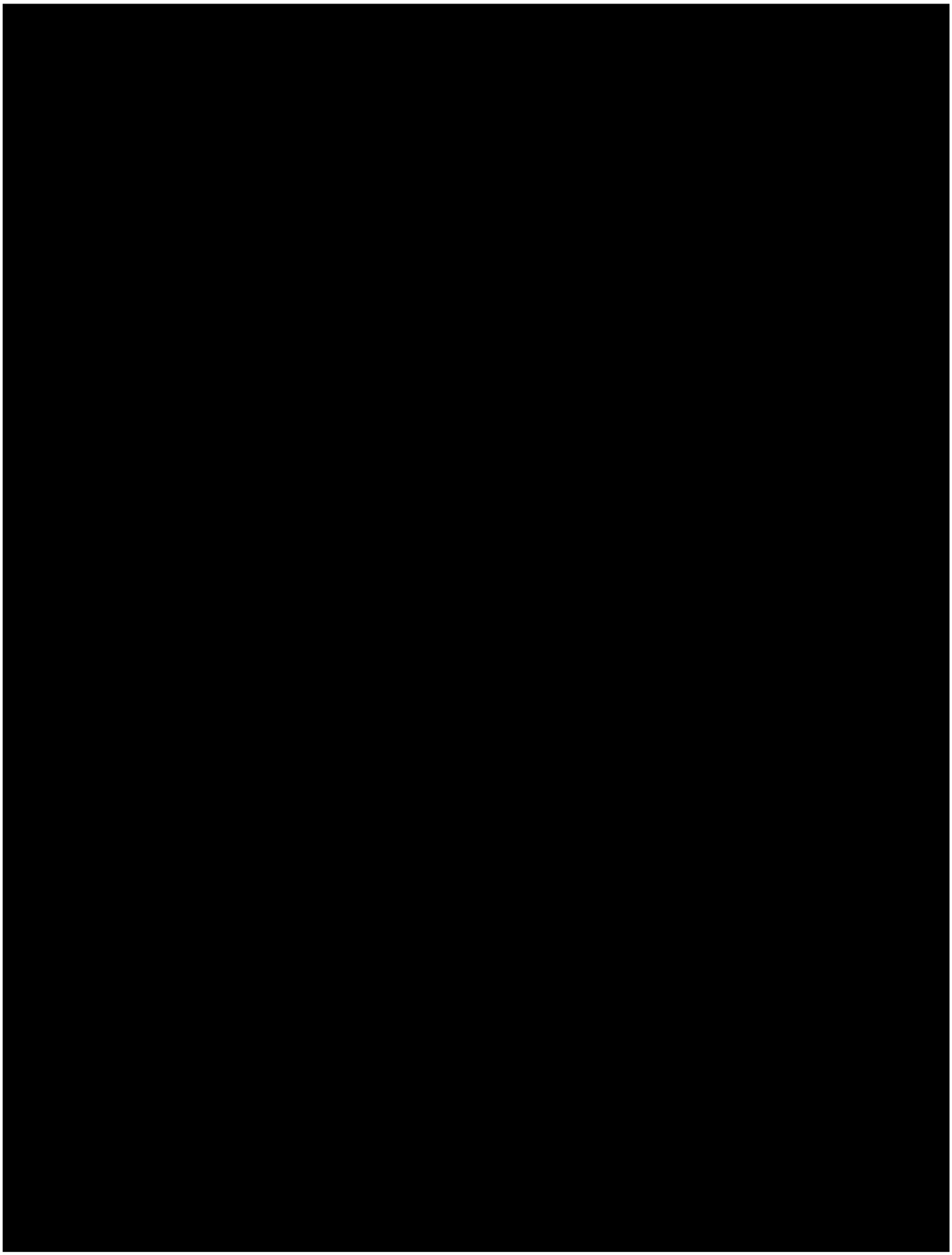


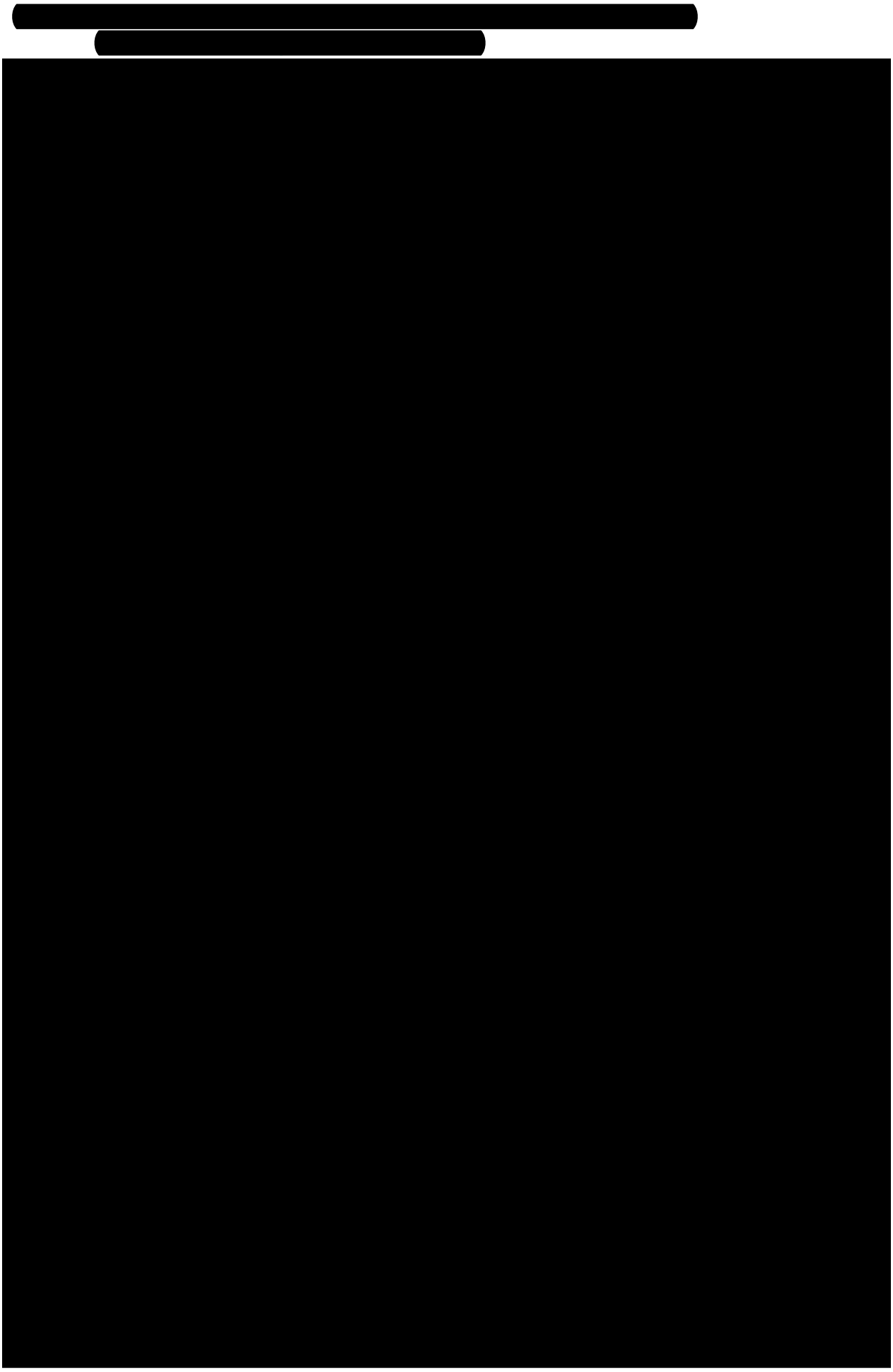


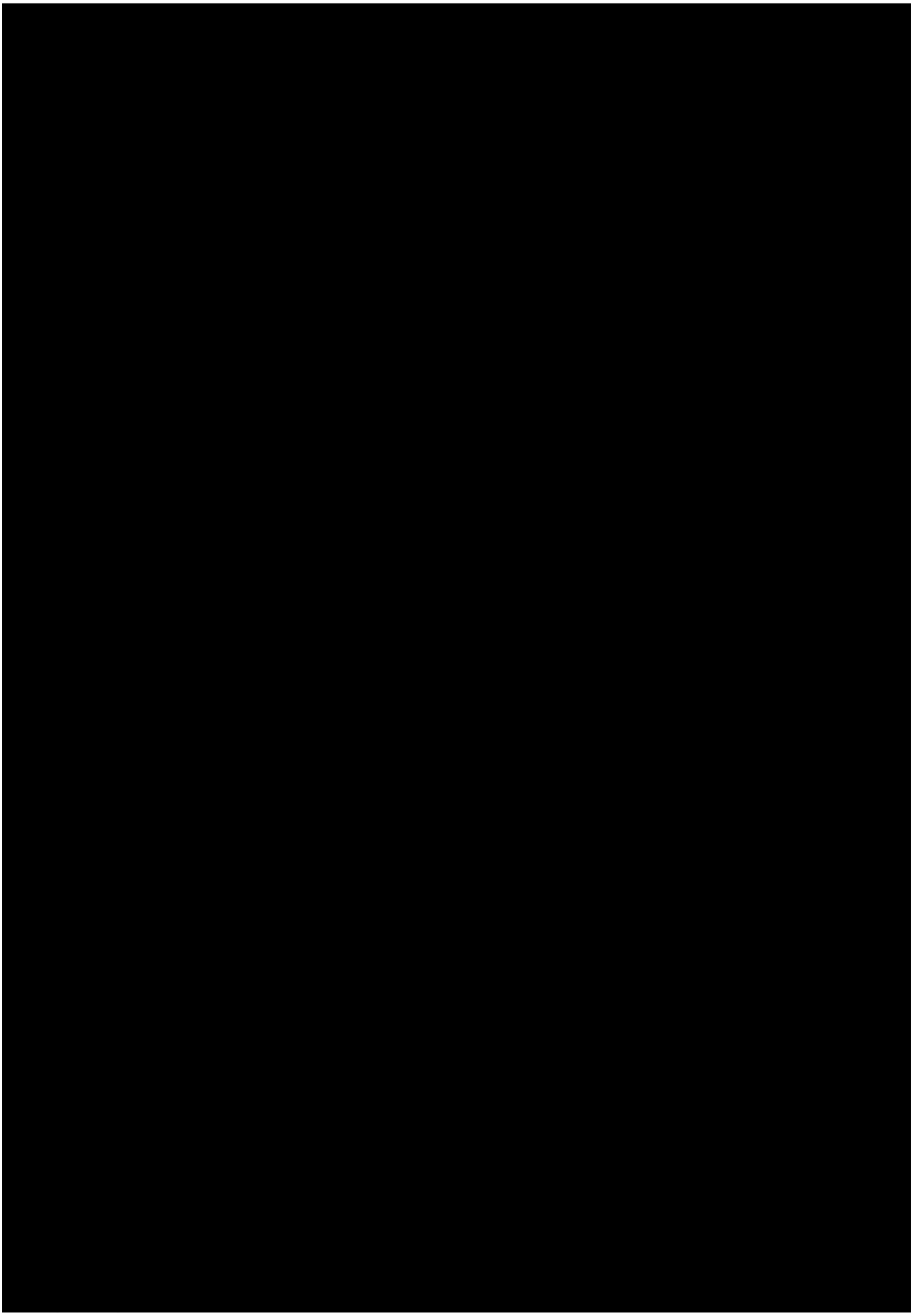


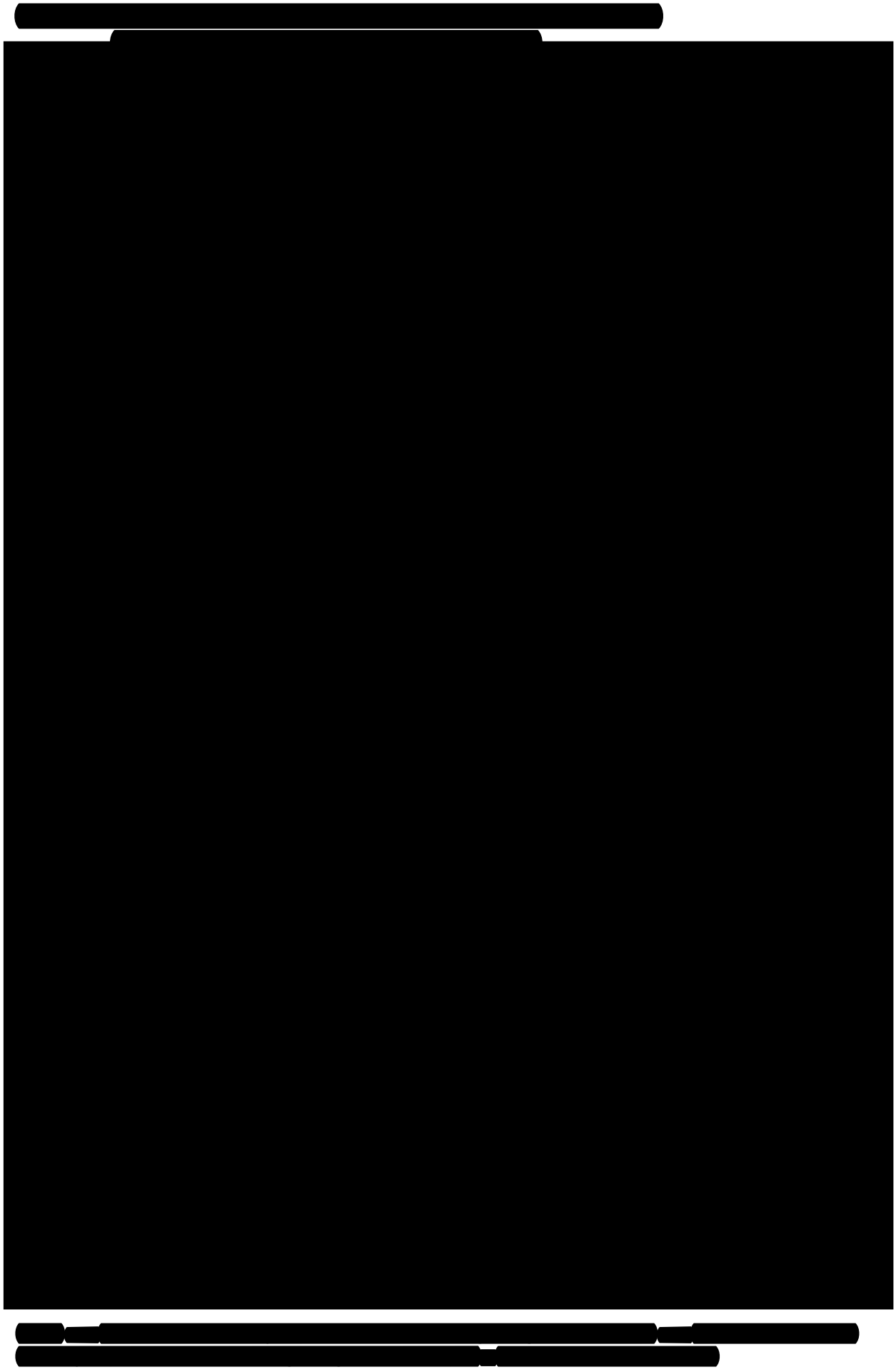


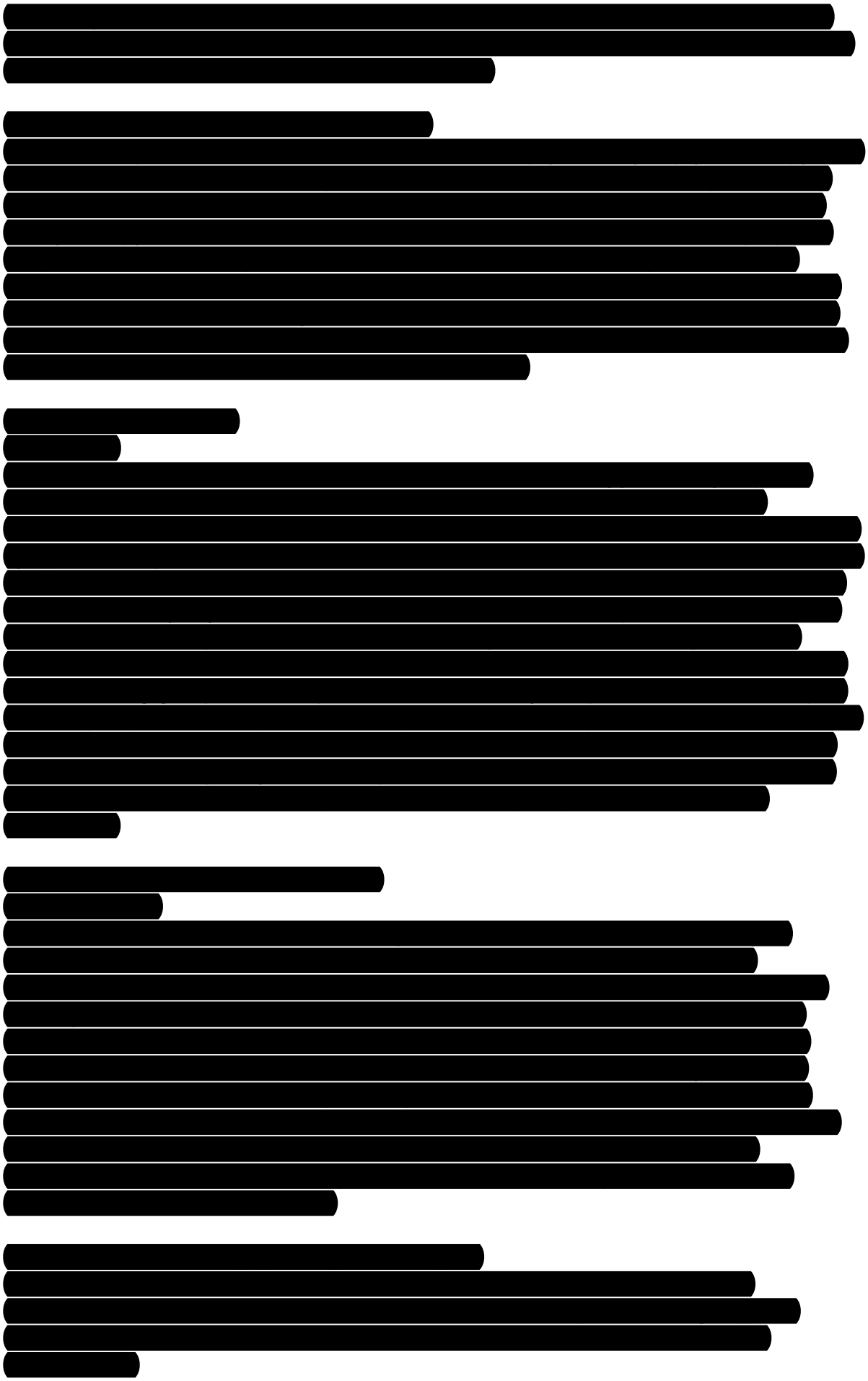












[redacted]

6.3 Association between primary outcomes and characteristics of therapist/patient

6.3.1 Introduction

There is little evidence relating to the association between outcome and therapist characteristics.

In contrast, there were many aspects of service user characteristics identified in a variety of studies, which correlated with outcome. Many of these are well known in clinical practice, particularly that comorbidity makes it less likely that therapy will achieve a good outcome. Around 70% of patients treated for depression were found to have comorbid disorders particularly anxiety (Emslie *et al*., 2003). We found the following statement highly relevant as regards clinical practice:

> 'The search for a pure i.e. non comorbid form of very early onset affective illness may be a futile undertaking, as comorbidity may be an intrinsic characteristic of children with affective disorders' (Emslie *et al*., 2003, p. 445).

Many authors also stressed the importance of assessing the network around the child because many factors, for example, parental mental ill health (including both affective and non-affective disorders), socio-economic disadvantage and family/parental dysfunction (particularly the impact of divorce and bereavement) (Beardslee, 1993) were negatively correlated with outcome and are also important in therapy selection.

6.3.2 Descriptive review

6.3.2.1 Therapist characteristics

The only study identified was Wiesz (1995), which showed better outcome in treating depression if qualified professional therapists were used rather than non-professional workers.

The importance of a better treatment alliance with the patient was also mentioned (Diamond *et al.*, 2002), but the evidence was from a case record study rather than an RCT.

6.3.2.2 Service user characteristics

Comorbidity was the most important factor that negatively correlates with therapy outcome and affects the chances of relapse (Emslie *et al*., 2003). There was some evidence that depression which is comorbid with anxiety may be helped by CBT as this has been shown to be effective in reducing anxiety (Brent *et al.*, 1998).

Severity of the depression, especially higher levels of chronicity, suicidality and hopelessness, as well as higher levels of cognitive distortion, were all negatively

correlated with outcome (Emslie *et al*., 2003; Brent *et al*., 1998). This may contribute to the difference in outcomes between clinical and advertised or recruited samples (Brent *et al*., 1998).

Poor parenting, negative interactions and higher family dysfunction/stress were also correlated with negative outcome (Emslie *et al*., 2003; Brent *et al*., 1998). Children with parents who have an affective disorder experience a rate of major depressive disorder 2.6 times greater than those with parents who have no disorder. The disorders of the children whose parents have also been affected also on average start earlier and last longer. There were also multiple risk factors involved since non-affective disorder was present in the majority of parents and often there was psychiatric disorder in both parents. Divorce or separation also had occurred in a substantial number of families. In fact the main effects of parental affective disorder was significant only when it was in combination with divorce (Beardslee, 1993).

The presence of abuse in all forms as well as trauma was shown in a number of studies to be correlated with higher rates of depression and more difficulty in treating it (Becker *et al*., 1991; Bergen *et al*., 2003; Meyerson *et al.*, 2002; Sadowski, 2002; Ramchandani & Jones, 2003).

One would expect the motivation of the patient to change to be correlated with treatment outcome but there was no directly reported evidence of this, other than the frequent report that hopelessness in the patient was negatively correlated with outcome. Similarly the effect of parental depression has been highlighted and this too may be mediated through hopelessness about any treatment proposed for the child. This may be directly communicated to the child or enacted through poor treatment adherence (Brent *et al.*, 1998; Emslie *et al*., 2003).

Parental involvement, treatment attendance, avoiding premature termination and matching parental/patient expectancies to treatment predicted positive treatment outcome. The presence of social support was also shown to be important especially for girls (Ramchandani & Jones, 2003; Emslie *et al*., 2003; Schraedley *et al*., 1999).

6.3.3 Clinical summary

Although little is known about therapist factors that influence outcome, there is some evidence that professionally trained therapists have better results than paraprofessionals with this group. As there is some evidence that a positive treatment alliance predicts better outcome, therapists who are better able to create this alliance with depressed young people are likely to be more successful.

Several characteristics of service users and their carers have been found to relate to psychological therapy outcome. Comorbid conditions and more severe or complex symptomatology are associated with less good outcomes. Parental depression/mental ill health, the impact of divorce, separation and bereavement are especially important family factors; feelings of hopelessness and family dysfunction can impact on the child in many different ways. Clinical populations generally present with comorbid conditions and more complex sets of problems within the individual, the family and the network; multi-modal treatments in sequence or parallel are therefore likely to be required.

6.4 Relapse prevention

6.4.1 Introduction

As described in Chapter 3 of this guideline, around 30% of cases recur within 5 years, many within a year of the earlier episode, and some of these young people develop episodes into adult life. Furthermore, as shown in our systematic review, a proportion of cases in all treatment trials remains diagnosable at the end of treatment, or remain symptomatic at a level below the threshold for diagnosis. A very important question for the care of children and young people with depression is thus whether there are ways to reduce the likelihood of either a relapse of depression following remission, or a long-term state of unhappiness and poor functioning following partial improvement during treatment. Clinically, it is likely that attention needs to be paid to social factors that may maintain a depressed state, or cause further episodes. Such factors would be likely to include relationship difficulties in the family or peer group, including for adolescents difficulty in establishing sexual relationships and achieving greater independence from parents. Difficulties arising from cultural and ethnic differences may be important, as may physical illness or any kind of disability, persistent comorbid disorders, and concern about family members (for example, parental psychiatric illness).

A systematic search of the literature identified no RCTs concerning the prevention of relapse of depression in children and/or young people that met the eligibility criteria set by the GDG. None of the other reports identified presented compelling evidence.

6.4.2 Databases searched and inclusion criteria

Table 12: Databases searched and inclusion criteria for studies of relapse prevention

Electronic databases	MEDLINE, EMBASE, PsycINFO, Cochrane Library
Date searched	Databases: inception to February 2004 (key journals searched using the electronic table of contents service February to September 2004)
Study design	Controlled trials
Patient population	Participants aged 5–18 years with recognised symptoms of depression
Interventions included	– Cognitive behavioural therapy (CBT) – Assessment only
Outcomes	Relapse

6.4.3 Studies considered[12]

The review team conducted a new systematic search for controlled trials that assessed the efficacy of psychological therapies for children and adolescents with depression for the prevention of relapse.

[12]Here and elsewhere in the guideline, each study considered for review is referred to by a study ID in capital letters (primary author and date of study publication, except where a study is *in press* or only submitted for publication, then a date is not used).

Table 13: Study information table for trials of CBT booster/continuation treatment versus assessment only/no treatment

Total no. of trials (total no. of participants)	*1 controlled trial (N = 41)*	*1 trial with historical control (N = 29)*
Study ID	CLARKE1999	KROLL1996
Diagnosis	MDD or dysthymia (DSM-III-R)	MDD (DSM-III-R)
Length of follow-up	12 & 24 months	6 months
Age	14–18 years	10–17 years

Two trials met the eligibility criteria: one controlled trial (CLARKE1999) comparing group CBT booster sessions (1–2 meetings) with assessment only using a 24-month follow-up, and one study (KROLL1996) comparing continuation with CBT (after acute phase treatment) with a historical control group using a 6-month follow-up.

6.4.4 Continuation/booster treatment

CLARKE1999 randomly assigned participants who had completed an acute phase treatment of group CBT to one of three 2-year follow-up conditions: (1) booster sessions (one to two meetings) and independent assessments every 4 months; (2) assessment only every 4 months; or (3) assessment only every 12 months. For the purpose of this review, relapse (defined as meeting criteria for unipolar depression) was analysed at 12 and 24 months in those participants who had recovered by the end of the acute phase treatment.

At the end of 12 and 24 months, the evidence was inconclusive regarding the risk of relapse, although there is only a small probability that group CBT booster sessions prevented relapse.

KROLL1996 compared the risk of relapse in participants who continued to receive group CBT for 6 months (after a course of five to eight sessions of CBT during the acute episode) with a historical control group drawn from a previous study of CBT (WOOD1995). All participants had remitted from MDD by the end of the acute phase.

By the end of 6-month follow-up, there was limited evidence that continuation of group CBT may reduce the risk of relapse (RR = 0.35; 95% CI, 0.11 to 1.14).

6.4.5 Clinical summary

We found no evidence to properly assess whether psychological therapies can prevent relapse in children and/or young people with depression. The evidence from non-randomised studies suggests that continuation of group CBT, but not booster sessions, may reduce the risk of relapse. Nevertheless, until further research is conducted using adequately designed relapse prevention studies, no conclusion can be reached.

6.5 Clinical practice recommendations

6.5.1 Psychological therapies

Watchful waiting

6.5.1.1 For children and young people with diagnosed mild depression who do not want an intervention or who, in the opinion of the healthcare professional, may recover with no intervention, a further assessment should be arranged, normally within 2 weeks ('watchful waiting'). (C)

6.5.1.2 Healthcare professionals should make contact with children and young people with depression who do not attend follow-up appointments. (C)

Psychological therapies for mild depression

[redacted]

Psychological therapies for moderate to severe depression

[redacted]

6.5.2 Association between primary outcomes and characteristics of therapist/patient

6.5.2.1 Before any treatment is started, healthcare professionals should assess, together with the young person, the social network around him or her. This should include a written formulation, identifying factors that may have contributed to the development and maintenance of depression, and that may impact both positively or negatively on the efficacy of the treatments offered. The formulation should also indicate ways that the healthcare professionals may work in partnership with the social and professional network of the young person. (B)

[redacted]

6.5.2.3 Psychological therapies used in the treatment of children and young people with depression should be provided by healthcare professionals who have been trained to an appropriate level of competence in the specific modality of psychological therapy being offered. (C)

6.5.2.4 Therapists should develop a treatment alliance with the family. If this proves difficult, consideration should be given to providing the family with an alternative therapist. (C)

6.5.2.5 Comorbid diagnoses and developmental, social and educational problems should be assessed and managed, either in sequence or in parallel, with the treatment for depression. Where appropriate this should be done through consultation and alliance with a wider network of education and social care. (B)

6.5.2.6 Attention should be paid to the possible need for parents' own psychiatric problems (particularly depression) to be treated in parallel, if the child or young person's mental health is to improve. If such a need is identified, then a plan for obtaining such treatment should be made, bearing in mind the availability of adult mental health provision and other services. (B)

7 Pharmacological and physical treatment of depression in children and young people

7.1 Introduction

In the absence, until relatively recently, of good quality controlled trials of pharmacological treatments in children and young people, treatment practice has relied on extrapolation from the results of studies on adults. The mainstay of pharmacological treatment has been antidepressant drugs, initially tricyclic antidepressants and more recently selective serotonin reuptake inhibitors (SSRIs) and other atypical antidepressants. The herbal preparation, St John's wort, has been used for centuries for medicinal purposes including the treatment of depression, but little is known about its use in children and young people. Other drugs such as lithium salts and antipsychotics have been tried but their use is rare and usually reserved for young people with severe, psychotic and chronic depression. Lithium has also been used to prevent relapse of depression.

7.2 Prescribing for children and young people

In the UK, drug manufacturers do not recommend these drugs for the treatment of depression in those under the age of 18 years and the drugs themselves are not licensed for this use in this age group. However despite this, considerable clinical experience of their use in young people has been developed, initially from open trials and more recently from controlled evaluations of drug treatments.

In 2000, the Royal College of Paediatrics and Child Health issued a policy statement on the use of unlicensed medicines or the use of licensed medicines for unlicensed applications, in children and young people. This states clearly that such use is necessary in paediatric practice and that doctors are legally allowed to prescribe unlicensed medicines where there are no suitable alternatives and where the use is justified by a responsible body of professional opinion (Joint Royal College of Paediatrics and Child Health/Neonatal and Paediatric Pharmacists Group Standing Committee on Medicines, 2000).

7.3 The Regulatory Framework

In December 2003, following a review by an Expert Working Group of the Committee on Safety of Medicines (CSM, 2003), the CSM advised that citalopram, escitalopram, fluvoxamine, paroxetine, sertraline, and venlafaxine should not be used as new therapy for the treatment of depression in under 18-year-olds (Duff, 2003c). Despite the lack of a marketing authorisation for fluoxetine in the treatment of major depressive disorder at that time, the CSM advised that the balance of risks and benefits for this drug was favourable.

Although the CSM used the word 'contraindicated' in relation to drugs other than fluoxetine in the treatment of depression in under 18s, its advice was also clear that child and adolescent psychiatrists are able to prescribe SSRIs other than fluoxetine in certain circumstances, for example, where drug treatment is indicated but a patient is intolerant of fluoxetine.

In April 2005 the Committee on Human Medicinal Products (CHMP) of the European Medicines Evaluation Agency[13] (EMEA) also issued advice on the paediatric use of SSRIs and SNRIs. This advice referred to all paediatric use of these drugs, not just the treatment of depression. The CHMP noted that suicide-related behaviour (suicide attempt/self-harm and suicidal thoughts) and hostility (predominantly aggression, oppositional behaviour and anger) were more frequently observed in clinical trials among children and adolescents treated with these antidepressants compared with those treated with placebo and advised that these products should not be used in children and adolescents except in their approved indications – usually not depression. However, like the CSM, the CHMP also made it clear that doctors may make decisions based on the individual clinical needs of a child or an adolescent to use these products for the treatment of depression or anxiety. In such circumstances the CHMP recommended that patients be monitored carefully for the appearance of suicidal behaviour, self-harm or hostility, particularly at the beginning of treatment.

The Food and Drug Administration[14] (FDA) issued a Public Health Advisory announcing a multi-pronged strategy to warn the public about the increased risk of suicidal thoughts and behaviour ('suicidality') in children and adolescents being treated with antidepressant medications in October 2004. The FDA directed manufacturers to add a 'black box' warning to the healthcare professional labelling of all antidepressant medications to describe this risk and emphasize the need for close monitoring of patients started on these medications. The FDA also determined that a Patient Medication Guide (MedGuide), should be developed and given to patients receiving the drugs to advise them of the risk and precautions that could be taken.

Fluoxetine is currently the only medication approved by the FDA in the US to treat depression in children and adolescents but these labelling changes are to be applied to the entire category of antidepressant. The new warning language does not prohibit the use of antidepressants in children and adolescents; rather, it warns of the risk of suicidality and encourages prescribers to balance this risk with clinical need.

A template for the labelling and medication guide issued by the FDA in January 2005 suggests that prescribers, families and caregivers of paediatric patients being treated with antidepressants for major depressive disorder or other indications, both psychiatric and nonpsychiatric, should be alerted about the need to monitor patients for the emergence of agitation, irritability, unusual changes in behaviour, and other symptoms, as well as the emergence of suicidality. It is suggested that monitoring is especially important in the early stages of treatment and at times of change in dosage.

---

[13]www.emea.eu.int/

[14]www.fda.gov/

7.4 Antidepressant drugs

7.4.1 Introduction

Tricyclic antidepressants are thought to influence mood via their ability to block the synaptic re-uptake of monoamines including noradrenaline (NA), 5-hydroxytryptamine (5HT or serotonin) and dopamine (DA). However, these drugs also have significant side effects and high toxicity in overdose. As a result, newer types of antidepressants have been developed that retain the ability to elevate mood whilst having fewer side effects and being less toxic in overdose. These drugs are also thought to influence mood via their ability to raise levels of intra-synaptic monoamines.

7.4.2 Databases searched and inclusion criteria

Table 14: Databases searched and inclusion criteria for clinical effectiveness and safety of antidepressant drugs

Electronic databases	MEDLINE, EMBASE, PsycINFO, Cochrane Library
Search dates	Databases: inception to January 2004 (key journals searched using the electronic table of contents service until September 2004)
Study design	RCT
Patient population	Participants aged 5–18 years diagnosed with depression
Interventions	– Tricyclic and related antidepressants – SSRIs: fluoxetine, paroxetine, sertraline, citalopram – Other atypical antidepressants (venlafaxine, mirtazapine, nefazodone) – Placebo
Outcomes	Remission, response to treatment, symptom levels, clinical improvement, severity of illness, functional status, adverse events, suicidality, discontinuation from treatment for any reason

7.4.3 Studies considered[15]

The review team conducted a new systematic search for RCTs that assessed the efficacy and/or safety of antidepressant drugs for children and adolescents with depression.

Twenty-six trials met the eligibility criteria set by the GDG, providing data on 3874 participants. Of these, nine were unpublished trials reviewed by the CSM (CSM, 2003) or FDA (Hammad, 2004), and the remainder were published in peer-reviewed journals between 1987 and 2004. In addition, 37 other studies were excluded from the analysis. The most common reason for exclusion was that there was no control group (further information about both included and excluded studies can be found in Appendix S on CD-ROM).

[15]Here and elsewhere in the guideline, each study considered for review is referred to by a study ID (primary author and date of study publication, except where a study is *in press* or only submitted for publication, then a date is not used).

Table 15: Study information for tricyclic antidepressants and individual SSRIs versus placebo

	Tricyclic anti-depressants	Fluoxetine	Paroxetine	Sertraline	Citalopram
	Published only	**Published only**	**Published + unpublished**	**Published + unpublished**	**Unpublished only**
Total no. of trials (total no. of participants)	*8 RCTs (567)*	*4 RCTs (576)*	*3 RCTs (658)*	*2 RCTs (1 publication) (376)*	*2 RCTs (422)*
Study ID	BIRMAHER1998 GELLER1989 GELLER1990 KELLER2001 KLEIN1998 KUTCHER1994 KYE1996 PUIGANTICH1987	EMSLIE1997 EMSLIE2002 SIMEON1990 TADS2004	KELLER2001 PAROXETINE STUDY 2 PAROXETINE STUDY 3	WAGNER2003*	WAGNER2004** CITALOPRAM STUDY 2
Diagnosis	MDD (DSM-III/DSM-III-R/ DSM-IV/RDC)	MDD (DSM-III/DSM-IV)	MDD (DSM-IV)	MDD (DSM-IV)	MDD (DSM-IV)
Baseline severity	CDRS-R range: 49.9 (4.2) to 51.3 (4.4) HDRS range: 12.00 (4.5) to 22.63 (5.17)	CDRS range: 57.1 (9.9) to 58.5 (10.15)	HDRS: 18.98	CDRS-R: 64.3 (11)	–
Dose	Varied depending on drug (see Appendix S on CD-ROM)	Up to 40	Up to 40	Up to 200	Up to 40
Treatment length	9 to 18 weeks	7 to 12 weeks	8 to 12 weeks	10 weeks	8 to 12 weeks
Age of patients	6–20 years	7–18 years	7–18 years	6–17 years	7–18 years

*Reported as SERTRALINE STUDY1 and SERTRALINE STUDY2 by the CSM (2003).
**Reported as CITALOPRAM STUDY1 by the CSM (2003).

Table 16: Study information for atypical antidepressants versus placebo and SSRIs versus tricyclic antidepressants

	Venlafaxine	Mirtazapine	Nefazodone	SSRIs vs. tricyclic antidepressants
	Published + unpublished	**Unpublished**	**Unpublished**	**Published only**
Total no. of trials (total no. of participants)	*3 RCTs (374)*	*2 RCTs (258)*	*2 RCTs (259)*	*2 RCTs (309)*
Study ID	MANDOKI1997 VENLAFAXINE STUDY 1 VENLAFAXINE STUDY 2	MIRTAZAPINE STUDY 1 MIRTAZAPINE STUDY 2	NEFAZODONE STUDY 1 NEFAZODONE STUDY 2	BRACONNIER2003 KELLER2001
Diagnosis	MDD (DSM-IV)	MDD (DSM-IV)	MDD	MDD (DSM-IV)
Baseline severity	–	–		HDRS range: SSRIs: 18.98 (4.15) to 24.1 (5.4); Tricyclics: 18.11 (4.19) to 22.9 (4.1)
Dose	Up to 225	Up to 40	Up to 600	Varied depending on drug (see Appendix S on CD-ROM)
Treatment length	8 weeks	8 weeks	8 weeks	8 weeks
Age	6–17 years	7–17 years		12–20 years

Of the 26 included trials, there were eight involving a comparison of a tricyclic antidepressant with placebo, 17 involving a comparison of an SSRI/atypical antidepressant with placebo, two involving a comparison of an SSRI with a tricyclic antidepressant, and one involving a comparison of a reversible monoamine oxidase inhibitors (MAOI) with placebo. Of the trials involving a SSRI, there were four published trials of fluoxetine, one published and two unpublished trials of paroxetine, two trials of sertraline (published in one paper using a combined analysis), and one published and one unpublished trial of citalopram (Table 15). Of the trials involving a comparison of an atypical antidepressant with placebo, there was one published and two unpublished trials of venlafaxine, two unpublished trials of mirtazapine, and two unpublished trials of nefazodone (Table 16). Of the trials involving a comparison of an SSRI with a tricyclic antidepressant, there were two published trials of paroxetine versus clomipramine or imipramine (Table 16).

7.4.4 Tricyclic antidepressants and individual SSRIs versus placebo

Table 17 summarises both benefits and harms of tricyclic antidepressants and individual SSRIs versus placebo (full results can be found in Appendix S on CD-ROM).

Table 17: Evidence summary table for tricyclic antidepressants and individual SSRIs versus placebo

	Tricyclic anti depressants	Fluoxetine	Paroxetine	Sertraline	Citalopram
	Published only	**Published only***	**Published + unpublished**	**Published + unpublished**	**Published + unpublished**
Total no. of trials (total no. of participants)	*8 RCTs (567)*	*2 RCTs (315)*	*3 RCTs (658)*	*2 RCTs (376)*	*2 RCTs (422)*
Remission					
Clinician completed					
CDRS/HDRS or DSM criteria	? K = 5; N = 331	○ K = 2; N = 315	○ K = 1; N = 180	**?** K = 2; N = 376	○ K = 1; N = 174
Response					
Clinician completed					
CDRS/HDRS	× K = 4; N = 300	○ K = 1; N = 219	× K = 2; N = 448	? K = 2; N = 376	–
Depressive symptoms					
Clinician completed					
K-SADS	? K = 4; N = 292	–	? K = 2; N = 443	–	–
CDRS/HDRS	? K = 6[†]; N = 352	● K = 3; N = 531	× K = 3; N = 648	○ K = 2; N = 364	○ K = 1; N = 174

Self-report					
BDI	**?** K = 2; N = 57	**?** K = 1; N = 96	–		
RADS	–	○ K = 1; N = 221	–	–	–
Clinical Improvement					
Clinician completed					
CGI-I	? K = 1; N = 182	● K = 3; N = 536	**?** K = 3; N = 644	**?** K = 2; N = 364	**?**‡
Severity of illness					
CGI-S	○ K = 1; N = 28	● K = 1; N = 215	–	○ K = 2; N = 364	**?**‡
Functional status					
Clinician completed					
C-GAS/GAF	? K = 5; N = 170	? K = 2; N = 286	? K = 2; N = 380	× K = 2; N = 364	?‡
Harms					
Any serious adverse event	⊘ K = 1; N = 182	**?** – favours drug K = 1; N = 219	⊗ K = 2; N = 455	? K = 2; N = 373	–

Continued

Table 17: (*Continued*)

	Tricyclic anti-depressants	Fluoxetine	Paroxetine	Sertraline	Citalopram
	Published only	**Published only***	**Published + unpublished**	**Published + unpublished**	**Published + unpublished**
Total no. of trials (total no. of participants)	*8 RCTs (567)*	*2 RCTs (315)*	*3 RCTs (658)*	*2 RCTs (376)*	*2 RCTs (422)*
Suicidal behaviour/ ideation (FDA)	–	⊘ K = 4; N = 576	⊘ K = 3; N = 662	⊘ K = 2; N = 373	⊘ K = 2; N = 422
Other adverse event	⊗ Adverse event (Asberg SES) K = 1; N = 42	⊘ harm-related adverse event K = 1; N = 221 ? suicide ideation (SIQ) K = 1; N = 221	–	? gastro-intestinal problems K = 2; N = 373 ⊘ psychiatric reactions K = 2; N = 373	⊘ treatment-emergent adverse event K = 2; N = 407 ⊘ early discontinuation because of suicide attempt K = 1; N = 133
Discontinuation because of adverse events	⊗ K = 4; N = 318	? K = 2; N = 315	⊘ K = 3; N = 669	⊗¶ K = 2; N = 376	⊘ K = 2; N = 407
Discontinuation for any reason	⊘ K = 7; N = 437	● – favours drug K = 3; N = 576	⊘ K = 3; N = 672	⊘ K = 2; N = 376	–

NNTB/NNTH					
Remission	NNTB 15 (NNTB 7 to ∞ to NNTH 34)	NNTB 6 (4 to 15)	NNTB 7 (4 to 100)	NNTB 34 (NNTB 5 to ∞ to NNTH 8)	NNTB 9 (NNTB 4 to ∞ to NNTH 100)
Serious adverse events	5.3% vs. 2.3%: NNTH 34 (NNTH 12 to ∞ to NNTB 40)	0.9% vs. 3.6%: NNTB 36 (NNTB 16 to ∞ to NNTH 124)	12% vs. 4.4%: NNTH 14 ∞ to 45)	3.7% vs. 3.3%: NNTH 228 (NNTH 24 to ∞ to NNTB 31)	79% vs. 70.1%: NNTH 12 (6 to 162)§
Suicidal behaviour/ ideation (FDA)		5.9% vs. 4.5%: NNTH 69 (NNTH 20 to ∞ to NNTB 45)	3.2% vs. 1.4%: NNTH 60 (NNTH 26 to ∞ to NNTB 167)	2.6% vs. 1.1%: NNTH 64 (NNTH 23 to ∞ to NNTB 76)	4.6% vs. 3.4%: NNTH 80 (NNTH 21 to ∞ to NNTB 41)
Discontinuation because of adverse events	25.3% vs. 5.9%: NNTH 6 (4 to 9)	5.7% vs. 6.3%: NNTH 117 (NNTH 10 to ∞ to NNTB 12)	10.5% vs. 5.2%: NNTH 21 (12 to 124)	Children (6–11 yrs) 13.5% vs. 1.1%: NNTH 8 (5 to 17) Young people (12–17 yrs) 3.9% vs. 3.8%: NNTH ∞	8.6% vs. 7.1%: NNTH 70 (NNTH 16 to ∞ to NNTB 27)

Note. ● = evidence of a clinically important effect favouring drug; ○ = limited evidence of a clinically important effect favouring drug; ⊗ = evidence of clinically important effect favouring placebo; ⊘ = limited evidence of clinically important effect favouring placebo; ✕ = there is unlikely to be a clinically important difference between drug and placebo; **?** = the evidence is inconclusive.

*Data are published except for suicide behaviour that includes unpublished data from the two trials of MDD and from one trial of obsessive-compulsive disorder.

†Outlier removed from analysis because of heterogeneity (KLEIN1994).

‡Reported as not statistically significant without further data.

§Treatment-emergent adverse events.

¶A sub-analysis by age group indicated that the increase risk was only apparent in children (6–11 years).

For individual SSRIs, treatment-emergent adverse events reported by 5% or more of the patients treated with the active drug are displayed in Figure 4 to Figure 8.

Figure 4: Treatment-emergent adverse events in patients taking fluoxetine or placebo: pooled placebo-controlled data

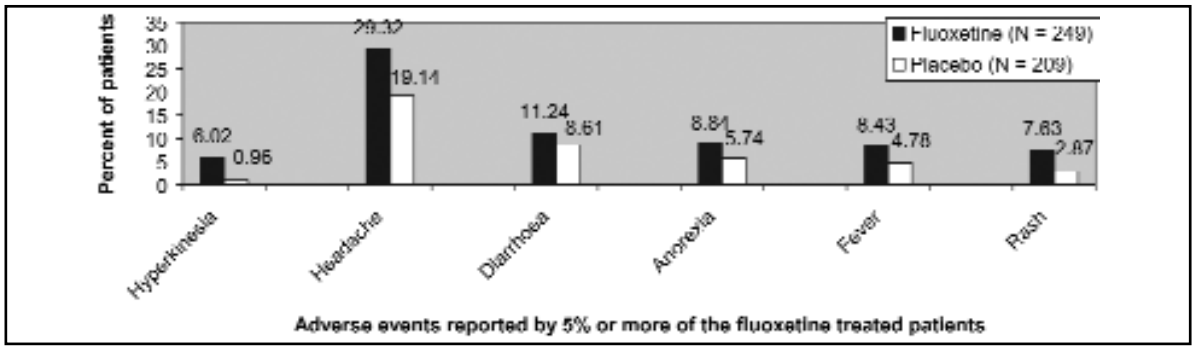


Figure 5: Treatment-emergent adverse events in patients taking paroxetine or placebo: pooled placebo-controlled data

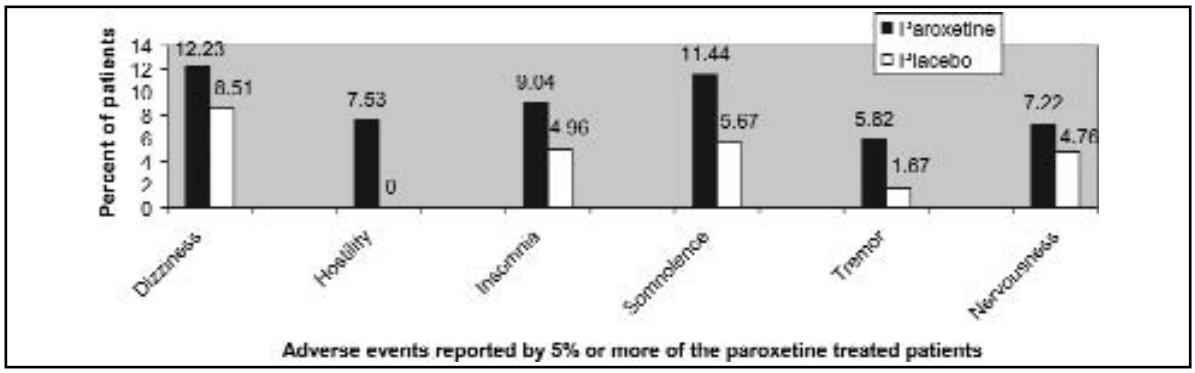


Figure 6: Treatment-emergent adverse events in patients (6–11 years) taking sertraline or placebo: pooled placebo-controlled data

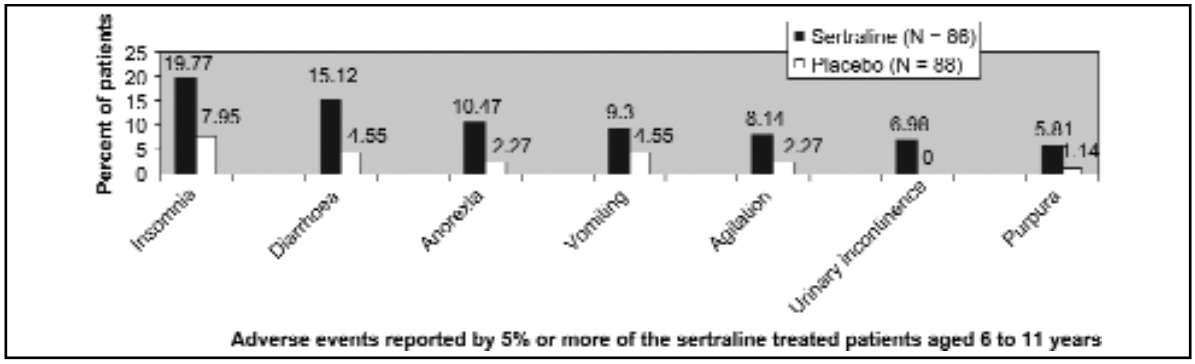


Figure 7: Treatment-emergent adverse events in patients (12–17 years) taking sertraline or placebo: pooled placebo-controlled data

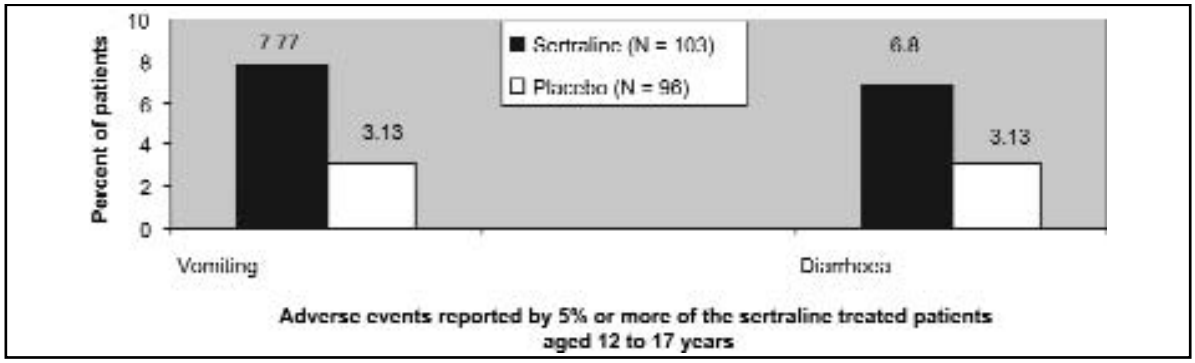
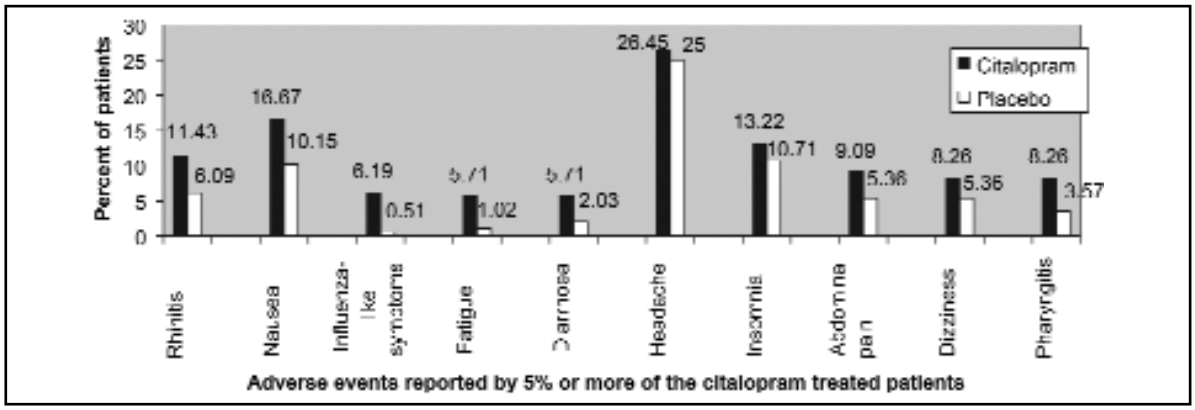


Figure 8: Treatment-emergent adverse events in patients taking citalopram or placebo: pooled placebo-controlled data (sample size varied depending on adverse event)



7.4.5 Selective serotonin reuptake inhibitors versus tricyclic and related antidepressants, and atypical antidepressants versus placebo

Table 18 summarises both benefits and harms of SSRIs versus tricyclic antidepressants and venlafaxine/mirtazapine versus placebo (full results can be found in Appendix S on CD-ROM).

Table 18: Evidence summary table for SSRIs versus tricyclic antidepressants, and atypical antidepressants versus placebo

	SSRIs vs. tricyclic anti-depressants	Venlafaxine	Mirtazapine
	Published only	**Published + unpublished**	**Unpublished only**
Total no. of trials (total no. of participants)	*2 RCTs (309)*	*3 RCTs (374)*	*2 RCTs (258)*
Remission			
Clinician completed			
CDRS/HDRS	○ K = 1; N = 188	–	
Response			
Clinician completed			
CDRS/HDRS	**?** K = 1; N = 188	–	–

Continued

Table 18: (*Continued*)

	SSRIs vs. tricyclic anti-depressants	Venlafaxine	Mirtazapine
	Published only	**Published + unpublished**	**Unpublished only**
Total no. of trials (total no. of participants)	*2 RCTs (309)*	*3 RCTs (374)*	*2 RCTs (258)*
Depressive symptoms			
Clinician completed			
K-SADS	**?** K = 1; N = 171	–	
CDRS/HDRS	**?** K = 1; N = 184	○ K = 3; N = 367	**?** K = 2; N = 249
Clinical Improvement			
Clinician completed			
CGI-I	**?** K = 2; N = 309	–	–
Harms			
Side effects	**?** K = 2; N = 309	–	–
Suicidal behaviour/ ideation (FDA)	–	⊗ K = 2; N = 361	? K = 1; N = 259
Discontinuation because of adverse events	○ K = 2; N = 309	⊗ K = 2; N = 361	? K = 1; N = 258
Discontinuation for any reason	○ K = 2; N = 309		
NNTB/NNTH			
Remission (or alternatively response)	NNTB = 9 (NNTB 4 to ∞ to NNTH 50)	–	–
Suicidal behaviour/ ideation (FDA)	–	4.4% vs. 0%: NNTH 23 (13 to 96)	0.6% vs. 0%: NNTH 170 (NNTH 38 to ∞ to NNTB 68)
Discontinuation because of adverse events	14.7% vs. 28.1%: NNTB = 9 (NNTB 4 to ∞ to NNTH 10)	9.9% vs. 2.8%: NNTH 14 (7 to 83)	5.3% vs. 3.4%: NNTH 53 (NNTH 15 to ∞ to NNTB 32)
Length of treatment	8 weeks	8 weeks	8 weeks
Age of patients	12–20 years	6–17 years	7–17 years

Note. ○ = limited evidence of a clinically important effect favouring drug; ⊗ = evidence of clinically important effect favouring placebo; **?** = the evidence is inconclusive.

For venlafaxine and mirtazapine, treatment-emergent adverse events reported by 5% or more of the patients treated with the active drug are displayed in Figure 9 and Figure 10.

Figure 9: Treatment-emergent adverse events in patients taking venlafaxine or placebo: pooled placebo-controlled data

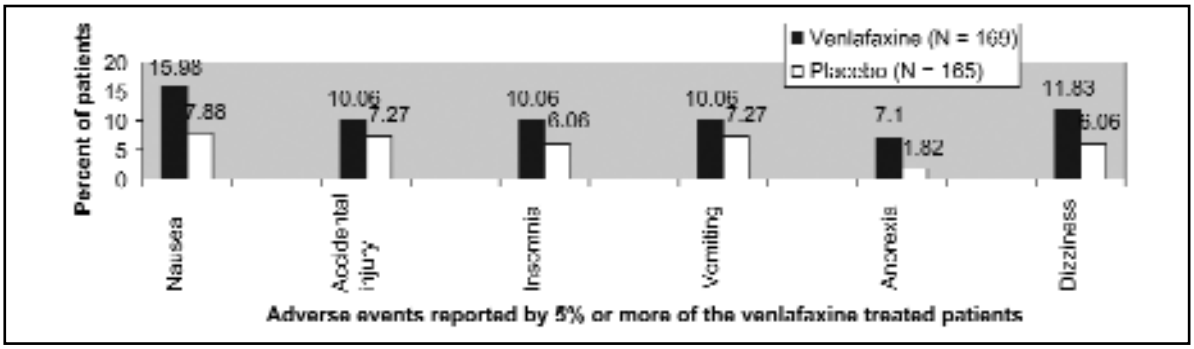
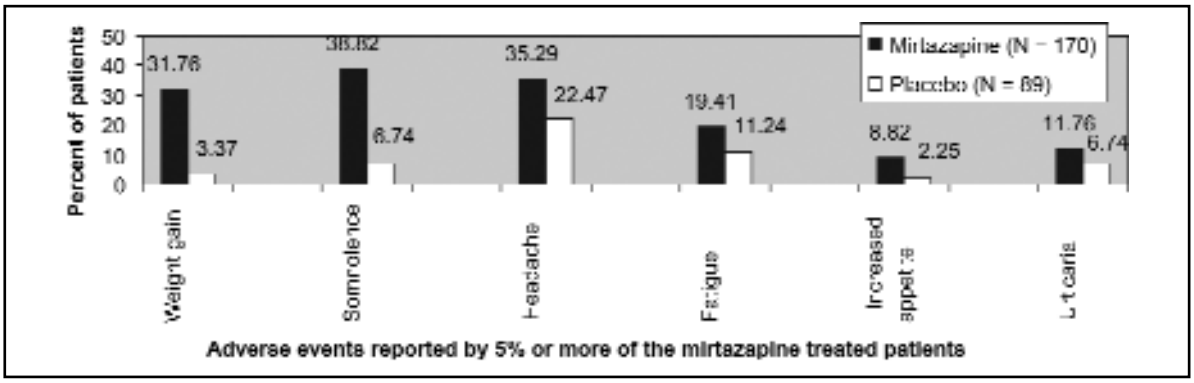


Figure 10: Treatment-emergent adverse events in patients taking mirtazapine or placebo: pooled placebo-controlled data



7.4.6 Safety of SSRIs/atypical antidepressants versus placebo

The safety of SSRIs/atypical antidepressants was further assessed by pooling the data on suicidal behaviour/ideation (full results can be found in Appendix S on CD-ROM). When all available data were combined, there was limited evidence that SSRIs/atypical antidepressants increase the risk of suicide behaviour/ideation (3.1% vs. 1.8%; RR = 1.79; 95% CI, 1.15 to 2.79). When data from SSRIs were pooled, there remained limited evidence of an increased risk of suicidal behaviour/ideation (4.1% vs. 2.7%; RR = 1.54; 95% CI, 0.66 to 2.46). When all available data were combined, there was limited evidence that SSRIs/atypical antidepressants increase the risk of early discontinuation of treatment because of adverse events (8.6% vs. 4.8%; RR = 1.79; 95% CI, 1.30 to 2.46).

7.4.7 St John's wort

St John's wort, an extract of the plant *hypericum perforatum*, has been used for centuries for medicinal purposes including the treatment of depression. However, no RCTs were found that assess the safety or efficacy of St John's wort in children or young people with depression.

It is not licensed as a medicine in the UK but can be bought 'over the counter' from health food shops, herbalists and community pharmacies. Many different branded preparations are available. At least 19 studies have been conducted in adults with depression (see adult depression guideline (NICE, 2004) for more information).

St John's wort has been found to interact with several types of prescription drugs and can increase or decrease their effectiveness and may increase the risk of serious adverse effects (Committee on Safety of Medicines, 2000). It may also cause photosensitivity.

7.4.8 Clinical summary

For individual outcomes, the quality of the evidence was generally moderate to low, reflecting the paucity of data and relatively small sample sizes of those studies available. Interpretation of harm-related outcomes, especially suicidality, was often difficult due to the short duration of some trials and because the trials were not necessarily designed to measure harm-related outcomes.

Tricyclic antidepressants

In children and young people, it is unlikely that tricyclic antidepressants have clinically important benefits over placebo for remission, response to treatment (50% reduction in symptoms) or reduction in symptoms.

At least in young people, there is limited evidence that tricyclics produce more side effects than placebo and are more likely to lead to discontinuation of treatment. It is also known that tricyclic antidepressants (except lofepramine) are highly toxic in overdose.

Fluoxetine (SSRI)

Fluoxetine (up to 40 mg/day for 7 to 12 weeks) showed efficacy across a range of outcomes in 7–18-year-olds. When compared with placebo, fluoxetine produced clinically important improvement in depressive symptoms (when measured with a clinician completed rating scale) and improved the likelihood of both remission and response to treatment, and had a positive impact regarding general clinical improvement and the severity of depression. Evidence is inconclusive regarding the impact on functional status.

The relative risk of serious adverse events and suicidal behaviour is difficult to interpret because of wide confidence intervals, although the rate of harm-related adverse events and suicidal behaviour/ideation was higher in fluoxetine than placebo-treated patients. However, there is evidence that fluoxetine is less likely than placebo to lead to discontinuation of treatment for any reason.

Treatment-emergent adverse events were generally similar between fluoxetine and placebo with the exception of hyperkinesias, headache and skin rash, where there is evidence suggesting increased risk for fluoxetine.

Paroxetine (SSRI)

In one study, paroxetine (up to 40 mg/day for 8 to 12 weeks) improved the likelihood of remission in 12–18-year-olds. However, further evidence suggested paroxetine had little impact on response to treatment, symptom levels, functional status, or clinical improvement.

There is evidence suggesting that paroxetine is more likely than placebo to bring about serious adverse effects, and limited evidence of increased risk of suicidal behaviour/ideation and early discontinuation from treatment because of adverse events or any reason.

Paroxetine is more likely than placebo to cause the following treatment-emergent adverse events: dizziness, hostility, insomnia, somnolence and tremor.

Sertraline (SSRI)

Sertraline (up to 200 mg/day for 10 weeks) when compared with placebo produced a small improvement in depressive symptoms in 6–17-year-olds. However, the evidence regarding remission, response to treatment, and clinical improvement is inconclusive. Evidence suggests no impact on functional status.

There is evidence suggesting that children (6–11 years) treated with sertraline are more likely to discontinue treatment because of adverse events, and for children/young people there is limited evidence of increased risk of suicidal behaviour/ideation. Evidence is inconclusive regarding serious adverse events. There is limited evidence for an increased risk of discontinuation of treatment for any reason.

In children (6–11 years), sertraline is more likely than placebo to cause the following treatment-emergent adverse events: nausea, diarrhoea, and anorexia; and may increase the risk of vomiting, agitation, urinary incontinence, and purpura. In young people (12–17 years), sertraline is more likely than placebo to cause vomiting and diarrhoea.

Citalopram (SSRI)

There was limited evidence that citalopram (up to 40 mg/day for 8 to 12 weeks), when compared with placebo, improved the chance of remission and response to treatment, and improved depressive symptoms in 7–18-year-olds.

There was limited evidence that citalopram increases the risk of treatment-emergent adverse events, suicidal behaviour/ideation, early discontinuation because of suicide attempts, and early discontinuation because of adverse events.

Citalopram is more likely than placebo to cause the following treatment-emergent adverse events: rhinitis, nausea, flu-like symptoms, fatigue, diarrhoea, and pharyngitis.

Venlafaxine (SNRI)

There was limited evidence suggesting that venlafaxine (up to 225 mg/day for 8 weeks) when compared with placebo produced a small improvement in depressive symptoms in 6–17-year-olds. There is no evidence to judge whether venlafaxine improves the likelihood of remission, response to treatment, or functional status.

Evidence suggests venlafaxine increases the risk of suicidal behaviour/ideation and leads to early discontinuation because of adverse events.

There is limited evidence to suggest that venlafaxine is more likely than placebo to cause the following treatment-emergent adverse events: nausea, anorexia and dizziness.

Mirtazapine (presynaptic a_2-antagonist)

Evidence is inconclusive regarding the effect of mirtazapine (15–45 mg/day for 8 weeks) when compared with placebo on depressive symptoms in 7–17-year-olds. There was no evidence regarding remission, response to treatment, or functional status.

Evidence for increased risk of suicidal behaviour/ideation was inconclusive. There was limited evidence that mirtazapine increases the risk of early discontinuation because of adverse events. Mirtazapine was more likely than placebo to cause the following treatment-emergent adverse events: weight gain, somnolence, headache, and increased appetite.

Pooled safety analysis for the SSRIs and the atypical antidepressants

There is limited evidence that across all available data for the SSRIs and atypical antidepressants, there is an increased risk of suicidal behaviour/ideation. These drugs also increase the risk of early discontinuation because of adverse events. For the SSRIs alone, there is limited evidence of an increased risk of suicidal behaviour/ideation.

SSRIs versus tricyclic antidepressants

Evidence suggests that an SSRI (paroxetine [up to 40 mg/day for 8 weeks]) when compared with a tricyclic antidepressant (imipramine [up to 200 mg/day for 8 weeks]) may increase the likelihood of remission in 12–18-year-olds. The evidence is inconclusive regarding response to treatment and depressive symptoms. The evidence is also inconclusive regarding clinical improvement when comparing a SSRI (paroxetine [up to 40 mg/day for 8 weeks]) with tricyclics (imipramine [up to 200 mg/day for 8 weeks] or clomipramine [up to 150 mg/day for 8 weeks]) in 12–20-year-olds.

Evidence is inconclusive regarding the risk of suffering adverse events and suggests that paroxetine may have a lower risk of early discontinuation of treatment because of adverse events.

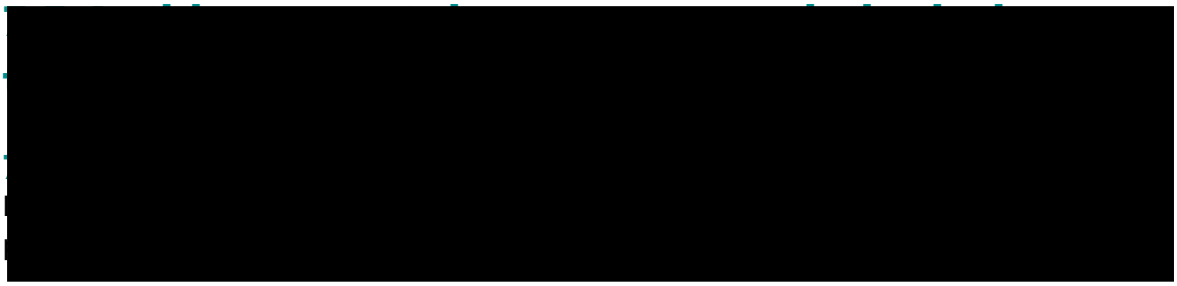
St John's wort

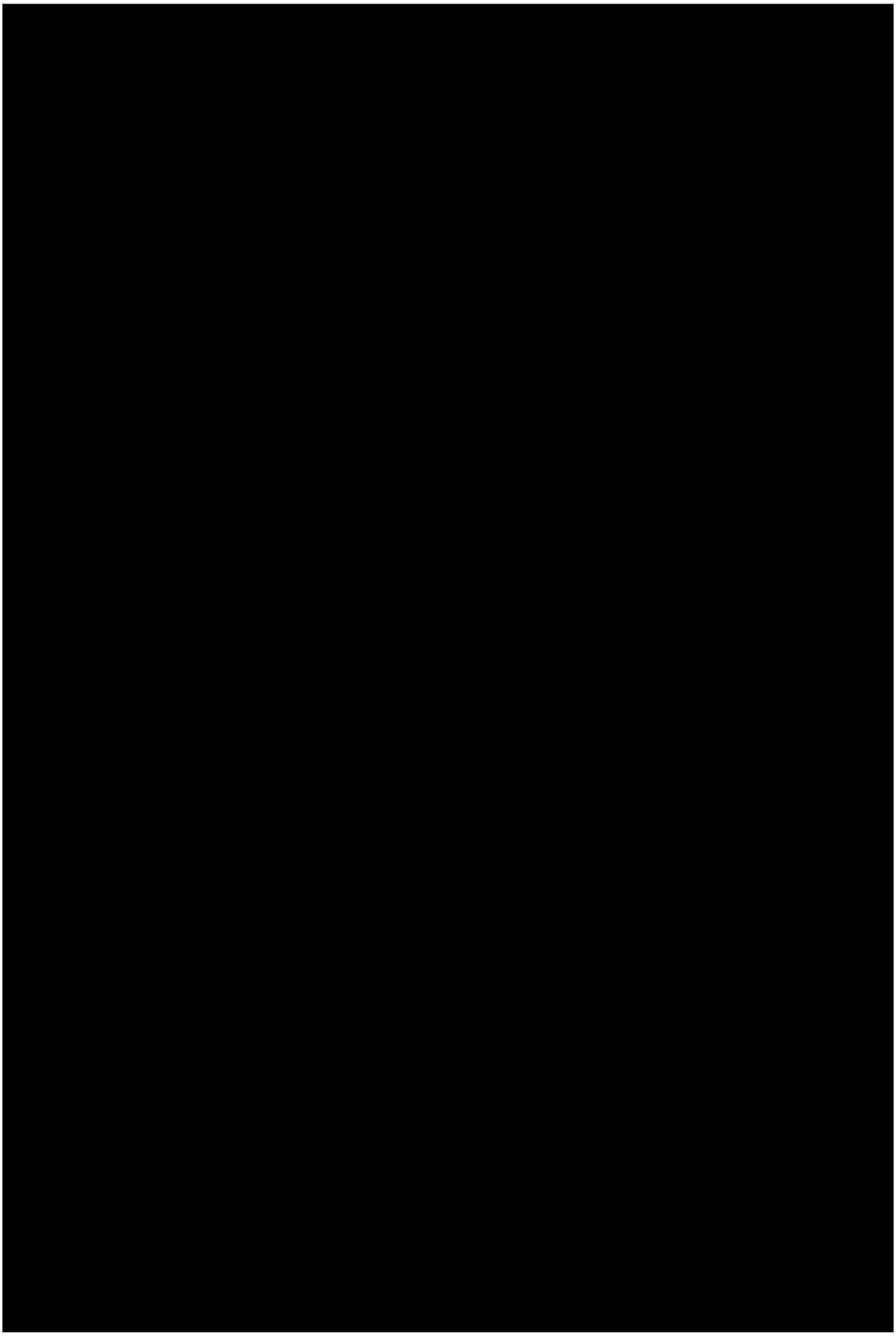
There is no evidence for the use of St John's wort in the treatment of depression in children and young people. However, it may cause problems when used in combination with other prescription medicines.

Conclusion

Fluoxetine is the only SSRI/atypical antidepressant where there is evidence of clinical effectiveness across a range of outcome measures. The evidence suggests that tricyclic antidepressants should not be used. Due to lack of data in young people, the potential for drug interactions and the fact that St John's wort is not a licensed medicine, it should not be prescribed.

There is limited evidence that all SSRIs/atypical antidepressants (including fluoxetine) may increase the risk of suicidal ideation and/or behaviour and increase the risk of discontinuation of treatment because of adverse events.





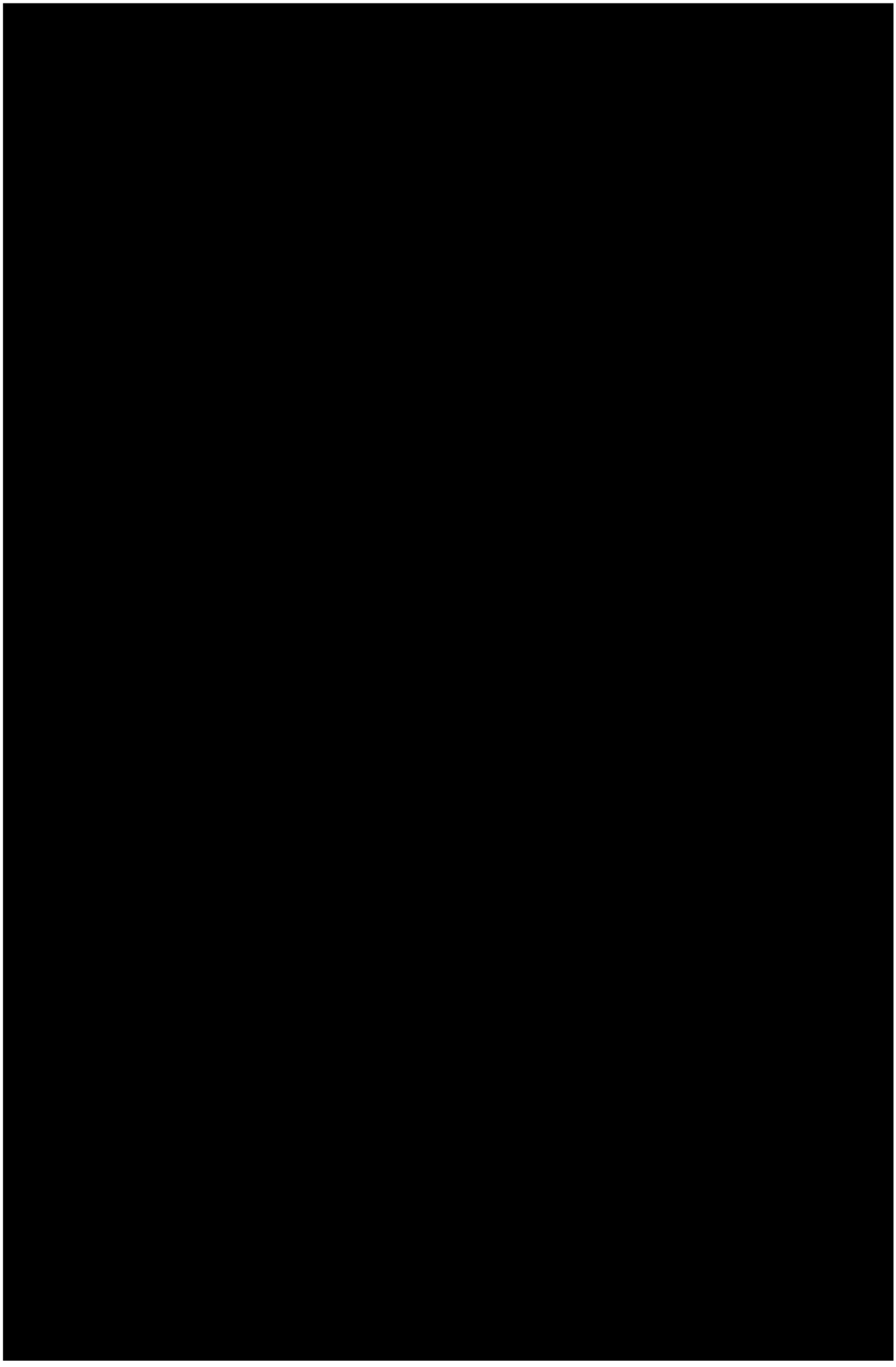


Table 19: (*Continued*)

	Fluoxetine alone vs. CBT alone	Fluoxetine with CBT vs. placebo	Fluoxetine with CBT vs. fluoxetine alone	Fluoxetine with CBT vs. CBT alone
	Published only	**Published only**	**Published only**	**Published only**
Total no. of trials (total no.	*1 RCT (220)*	*1 RCT (219)*	*1 RCT (216)*	*1 RCT (218)*

[redacted]

7.6 Other drug treatment

7.6.1 Introduction

There is a paucity of evidence regarding the use of drugs other than antidepressants to treat depression in children and young people. A search of the literature revealed only one RCT that compared lithium with placebo. Lithium is a drug that was first used to treat mania, but is also used to prevent relapse in patients with bipolar disorders or recurrent depression. Lithium has many pharmacological effects and the exact mechanism(s) by which it reduces mania and prevents relapse are unclear.

7.6.2 Treatment included

The following treatment was included:

- Lithium.

7.6.3 Studies considered

The review team conducted a new systematic search for RCTs that assessed the efficacy of drugs other than antidepressants for children and adolescents with depression.

One trial (GELLER1998) met the eligibility criteria set by the GDG, providing data on 30 participants. The duration of the study was 10.5 weeks. All participants were diagnosed with major depressive disorder by DSM-III-R and were between the ages of 6–12 years old. All participants had family history predictors of future bipolar disorder. Forty percent also had dysthymia and a significant proportion had comorbid ADHD or an anxiety disorder.

7.6.4 Lithium versus placebo

Evidence reported by GELLER1998 suggests lithium when compared with placebo is unlikely to improve depressive symptoms (K-SADS treatment x time (ANCOVA) covarying for baseline K-SADS was $F = 0.01$, $p = 0.91$), or improve general functioning (Child Global Assessment Scale [C-GAS] treatment x time ANCOVA covarying for baseline C-GAS was $F = 3.44$, $p = 0.07$). With regard to adverse events, more lithium-treated participants had vomiting (31.3% versus 0%). There is limited evidence that lithium also increased the risk of early discontinuation of treatment because of adverse events (RR = 7.00; 95% CI, 0.41 to 119.46) and early discontinuation for any reason (RR = 10.11; 95% CI, 0.62 to 164.68).

7.6.5 Clinical summary

There is no evidence regarding the effect of lithium on remission or response to treatment. Lithium is unlikely to improve depressive symptoms or general functioning over and above placebo. Evidence suggests lithium may increase vomiting and the risk of early discontinuation from treatment because of adverse events.

7.7 Relapse prevention

A systematic search of the literature identified no RCTs concerning the prevention of relapse of depression in children and/or young people that met the eligibility criteria set by the GDG. A wider search revealed only case series and naturalistic follow-up reports (Birmaher *et al*., 2002; Garber *et al*., 1988; Emslie *et al*., 1998; Pine, 2002). Clinical practice follows adult guidance with recommendations that if young people respond to antidepressant medication they should continue on that treatment for 6 to 12 months, with medication being discontinued at that point if the young person is well. Phased withdrawal over 4 to 6 weeks is often recommended but there is no clear evidence to support this. None of the reports identified presented compelling evidence on treatment strategies for either continuation (how long to continue treatment after a positive response) or maintenance (how to prevent recurrence).

7.8 Electroconvulsive therapy (ECT)

7.8.1 Introduction

Electroconvulsive therapy (ECT) is a controversial treatment, especially when used with young people. However, its use is rare in the UK and, similarly to adults, largely reserved for young people whose depression is resistant to other treatments or in potentially life-threatening situations.

7.8.2 Current practice

ECT is an electrically induced seizure. An electric current is passed briefly through the brain via electrodes applied to the scalp to induce generalised seizure activity. The individual receiving the treatment is placed under general anaesthetic and muscle relaxants are given to prevent body spasms. The ECT electrodes can be placed on both sides of the head (bilateral placement) or on one side of the head (unilateral placement), usually the non-dominant side of the brain.

ECT is used extremely rarely in the UK. Duffett *et al*., (1999) attempted to survey its use in young people under the age of 18 during one year in 1996. They found 12 young people (aged 12–17 years) who had received ECT, eight of whom had a diagnosis of depression (six with unipolar depression). The total represents a rate of 0.02 per 100,000 total population per year, similar to a 10-year retrospective study in Scotland (Robertson *et al*., 1997).

7.8.2.1 Indications for use

In 2002 the American Academy of Child and Adolescent Psychiatry (AACAP) published a practice parameter for the use of ECT with adolescents (AACAP, 2002). The following is a summary of the main points relevant to this guideline:

- The adolescent should be diagnosed with severe, persistent depression, with or without psychotic features
- The symptoms must be severe, persistent and significantly disabling, including life-threatening symptoms such as refusal to eat or drink, severe suicidality, or florid psychosis
- Other treatments should have been tried and failed, including at least two or more trials of appropriate psychopharmacology, unless the severity of symptoms precludes waiting for a response to other treatments
- A psychiatrist experienced in the use of ECT, but not involved in the case should give a second opinion
- Every adolescent should have a memory assessment before treatment, at the end of treatment and at 3–6 months after treatment
- The anaesthetist should have experience in the treatment of adolescents
- Policies should be in place covering consent for the use of ECT with adolescents.

In the UK, Duffett *et al*., (1999) found that of the eight young people who had a diagnosis of depressive disorder, ECT was used in four as a life-saving intervention and in six due to a failure to respond to medication. In 2003, a NICE health technology appraisal on the use of ECT reported that there was insufficient information to allow appropriate risk–benefit assessment for children and young people, although the risks may be enhanced in this age group.

7.8.3 Studies considered

The review team conducted a new systematic search for RCTs that assessed the efficacy and/or safety of ECT for children and adolescents with depression. However, no controlled trials were found. A wider search for evidence found several reviews of single case studies or case series using variable methodology and variable outcome measures (Baldwin & Oxlad, 1996; Rey & Walter, 1997; Walter *et al*., 1999a).

7.8.4 Clinical evidence

No controlled trials were found on the use of ECT in young people. Most of the evidence relies on single case studies or case series using variable methodology and variable outcome measures. There is likely to be a publication bias in favour of positive outcomes, especially with single case studies.

Rey and Walter (1997) found 66 reports describing ECT in 396 patients aged 18 years or younger. Baldwin and Oxlad (1996) reviewed 217 cases of 'minors' who had received ECT between 1947 and 1996. Search strategies were not reported.

Other reviews and case series considered included much smaller numbers.

7.8.4.1 Efficacy

Walter and colleagues (1999a) reviewed the outcomes of 87 patients with depression who had been treated with ECT aged 18 years or younger. They concluded 58 (67%) had remitted, or showed marked improvement of symptoms after treatment.

Baldwin and Oxlad, in their review of 217 'minors' also suggest positive outcomes for many following ECT, although they have not included depressive disorder as a sub-group within their analysis. Despite generally positive findings, they question the interpretation of this data due to the methodology and publication bias in the published literature. However, Walter and colleagues (1999a) found significant differences between diagnostic categories, in particular, showing that ECT was more effective with depressed young people than for other diagnoses such as schizophrenia. This is suggestive of a real effect for the depressed group, over and above any possible publication bias.

Duffett and colleagues (1999), in their UK case series of 12 under 18-year-olds who received ECT during 1996, used the Clinical Global Impression of Change and found five had much, or very much, improved; three had improved; three were unchanged and for one the data was missing. Although this sample is small, it is UK only and avoids the issues of publication bias.

7.8.4.2 Adverse events

The main side effects for young people receiving ECT for depression appear to be the same as for adults. ECT may cause short or long-term memory impairment for past events (retrograde amnesia) and current events (anterograde amnesia). As this type of cognitive impairment is a feature of many mental health problems, including severe depression, it may sometimes be difficult to differentiate the effects of ECT from those associated with the condition itself.

The risks associated with ECT may be enhanced 'in children and young people, and therefore clinicians should exercise particular caution when considering ECT treatment in [this] group' (NICE, 2003).

One small study has been published (Cohen *et al*., 2000) assessing cognitive functioning, in particular memory functioning, in 10 under 19-year-olds who had received bilateral ECT an average of 3.5 years previously. Cognitive test scores were similar to those in a comparison group matched for sex, age and diagnosis. Six patients reported subjective memory loss immediately after treatment and one complained of persistent memory loss at follow-up. It is not possible to draw firm conclusions from these findings due to the small numbers and retrospective design.

There are no studies which provide evidence of the impact of ECT on the developing brain.

7.8.4.3 User and parent opinion

Three studies were identified which looked at the views of young people who had received ECT and their parents (Walter *et al*., 1999b; Walter *et al.*, 1999c; and Taieb *et al*., 2000). Each study used a telephone questionnaire. Walter and colleagues (1999b) used a sample of 26 patients, Walter and colleagues (1999c) sampled 28 parents and Cohen and colleagues (2000) sampled 10 patients and their parents (n = 18).

The views of the young people who had received ECT were mixed, but a small majority believed that ECT was helpful, and more still believed that the effects of their illness were worse than the effects of the ECT. Few young people felt they had any real understanding of the treatment and many expressed a range of fears associated with ECT. Most experienced memory impairment but this largely resolved over time.

Parents were generally as positive, or more positive in their views about ECT, than young people who had received the treatment. Parents were more knowledgeable about what ECT entailed.

7.8.5 Clinical summary

In the UK, ECT is used extremely rarely for the treatment of depression in young people. It is usually reserved for cases where there is a perceived life-threatening situation or where extensive alternative treatments have failed. Without controlled trials, the evidence for efficacy is limited, but case studies and case series suggest it may be of benefit.

The most significant side effect from ECT is memory impairment. The effects of ECT on the developing brain are unknown.

7.9 Psychotic depression

7.9.1 Introduction

Psychotic depression (a major depressive disorder associated with hallucinations and/or delusions) can occur in children and adolescents but has been subject to little systematic study. Pre-pubertal children are more likely to present mostly with auditory hallucinations whilst adolescents may have both delusions and hallucinations. Psychotic depression has been associated with more severe depression, greater long-term morbidity, and higher risk of recurrence, bipolar disorder and suicidality. The presence of psychotic symptoms is suggested to be an indication for the early use of antidepressant medication but also an indication of greater resistance to antidepressant monotherapy (AACAP, 1998).

7.9.2 The management of psychotic depression

Systematic research into depression with psychotic features has been limited by the fact that the disorder is not defined clearly as a distinct diagnostic subtype and because of the difficulties in enrolling such patients in research studies. As a result there are no good quality epidemiological studies and no controlled studies on the acute or

longer-term treatment of psychotic depression. A systematic search of electronic databases found only anecdotal reports, case series and best practice guidance from expert bodies. One small study of adolescents has suggested that the combination of antidepressants with antipsychotics may be helpful for patients with psychotic depression (Geller *et al.*, 1985), but this study focused more on plasma drug levels than on outcome measures.

7.10 Clinical practice recommendations

7.10.1 Using antidepressants in children and young people

7.10.1.1 Antidepressant medication should not be used for the initial treatment of children and young people with mild depression. (B)

7.10.1.4 If an antidepressant is to be prescribed this should only be following assessment and diagnosis by a child and adolescent psychiatrist. (C)

7.10.1.5 When an antidepressant is prescribed to a child or young person with moderate to severe depression, it should be fluoxetine as this is the only antidepressant for which clinical trial evidence shows that the benefits outweigh the risks. (A)

7.10.1.6 If a child or young person is started on antidepressant medication, they (and their parent(s) or carer(s) as appropriate) should be informed about the rationale for the drug treatment, the delay in onset of effect, the time course of treatment, the possible side effects, and the need to take the medication as prescribed. Discussion of these issues should be supplemented by written information appropriate to the child or young person's and parents' or carers' needs that covers the issues described above and includes the latest patient information advice from the relevant regulatory authority. (GPP)

7.10.1.7 A child or young person prescribed an antidepressant should be closely monitored for the appearance of suicidal behaviour, self-harm or hostility,

particularly at the beginning of treatment, by the prescribing doctor and the healthcare professional delivering the psychological therapy. Unless it is felt that medication needs to be started immediately, symptoms that might be subsequently interpreted as side effects should be monitored for 7 days before prescribing. Once medication is started the patient and their parent(s) or carer(s) should be informed that if there is any sign of new symptoms of these kinds, urgent contact should be made with the prescribing doctor. (GPP)

7.10.1.8 When fluoxetine is prescribed for a child or young person with depression, the starting dose should be 10 mg daily. This can be increased to 20 mg daily after 1 week if clinically necessary, although lower doses should be considered in children of lower body weight. There is little evidence regarding the effectiveness of doses higher than 20 mg daily. However, higher doses may be considered in older children of higher body weight and/or when, in severe illness an early clinical response is considered a priority. (GPP)

7.10.1.9 When an antidepressant is prescribed in the treatment of a child or young person with depression and a self-report rating scale is used as an adjunct to clinical judgement, this should be a recognised scale such as the Mood and Feelings Questionnaire (MFQ). (GPP)

7.10.1.10 When a child or young person responds to treatment with fluoxetine, medication should be continued for at least 6 months after remission (defined as no symptoms and full functioning for at least 8 weeks); in other words, for 6 months after this 8-week period. (C)

7.10.1.11 If treatment with fluoxetine is unsuccessful or is not tolerated because of side effects, consideration should be given to the use of another antidepressant. In this case sertraline or citalopram are the recommended second-line treatments. (B)

7.10.1.12 Sertraline or citalopram should only be used when the following criteria have been met:

- The child or young person and their parent(s) or carer(s) have been fully involved in discussions about the likely benefits and risks of the new treatment and have been provided with appropriate written information. This information should cover the rationale for the drug treatment, the delay in onset of effect, the time course of treatment, the possible side effects, and the need to take the medication as prescribed; it should also include the latest patient information advice from the relevant regulatory authority

- The child or young person's depression is sufficiently severe and/or causing sufficiently serious symptoms (such as weight loss or suicidal behaviour) to justify a trial of another antidepressant

- There is clear evidence that there has been a fair trial of the combination of fluoxetine and a psychological therapy (in other words that all efforts have been made to ensure adherence to the recommended treatment regimen)

- There has been a reassessment of the likely causes of the depression and of treatment resistance (for example other diagnoses such as bipolar disorder or substance abuse)

- There has been advice from a senior child and adolescent psychiatrist – usually a consultant

- The child or young person and/or someone with parental responsibility for the child or young person (or the young person alone, if over 16 or deemed competent) has signed an appropriate and valid consent form. (C)

7.10.1.13 When an antidepressant other than fluoxetine is prescribed for a child or young person with depression, the starting dose should be half the daily starting dose for adults. This can be gradually increased to the daily dose for adults over the next 2 to 4 weeks if clinically necessary, although lower doses should be considered in children with lower body weight. There is little evidence regarding the effectiveness of the upper daily doses for adults in children and young people, but these may be considered in older children of higher body weight and/or when, in severe illness, an early clinical response is considered a priority. (GPP)

7.10.1.14 When a child or young person responds to treatment with citalopram or sertraline, medication should be continued for at least 6 months after remission (defined as no symptoms and full functioning for at least 8 weeks). (C)

7.10.1.15 Paroxetine and venlafaxine should not be used for the treatment of depression in children and young people. (A)

7.10.1.16 Tricyclic antidepressants should not be used in the treatment of depression in children and young people. (C)

7.10.1.17 Where antidepressant medication is to be discontinued, the drug should be phased out over a period of 6 to 12 weeks with the exact dose being titrated against the level of discontinuation/withdrawal symptoms. (C)

7.10.1.18 As with all other medications, consideration should be given to possible drug interactions when prescribing medication for depression in children and young people. This should include possible interactions with complementary and alternative medicines as well as with alcohol and 'recreational' drugs. (GPP)

7.10.1.19 Although there is some evidence that St John's wort may be of some benefit in adults with mild to moderate depression, this cannot be assumed for children or young people, for whom there are no trials upon which to make a clinical decision. Moreover, it has an unknown side-effect profile and is known to interact with a number of other drugs, including contraceptives. Therefore St John's wort should not be prescribed for the treatment of depression in children and young people. (C)

7.10.1.20 A child or young person with depression who is taking St John's wort as an over-the-counter preparation should be informed of the risks and

advised to discontinue treatment while being monitored for recurrence of depression and assessed for alternative treatments in accordance with this guideline. (C)

7.10.2 Antidepressants combined with psychological treatments

7.10.2.1 If moderate to severe depression in a child or young person is unresponsive to psychological therapy after four to six treatment sessions, a multidisciplinary review should be carried out. (GPP)

7.10.2.2 Following multidisciplinary review, if the child or young person's depression is not responding to psychological therapy as a result of other coexisting factors such as the presence of comorbid conditions, persisting psychosocial risk factors such as family discord, or the presence of parental mental il-health, alternative or perhaps additional psychological therapy for the parent or other family members, or alternative psychological therapy for the patient, should be considered. (C)

7.10.3 Discharge after first episode

7.10.3.1 When a child or young person is in remission (less than two symptoms and full functioning for at least 8 weeks) they should be reviewed regularly for 12 months by an experienced CAMHS professional. The exact frequency of contact should be agreed between the CAMHS professional and the child or young person and/or the parent(s) or carer(s) and recorded in the notes. At the end of this period, if remission is maintained, the young person can be discharged to primary care. (C)

7.10.3.2 CAMHS should keep primary care professionals up to date about progress and the need for monitoring of the child or young person in primary

care. CAMHS should also inform relevant primary care professionals within 2 weeks of a patient being discharged and should provide advice about whom to contact in the event of a recurrence of depressive symptoms. (GPP)

7.10.3.3 Children and young people who have been successfully treated and discharged but then re-referred should be seen as soon as possible rather than placed on a routine waiting list. (GPP)

7.10.4 Recurrent depression and relapse prevention

7.10.4.1 Specific follow-up psychological therapy sessions to reduce the likelihood of, or at least detect, a recurrence of depression should be considered for children and young people who are at a high risk of relapse (for example, individuals who have already experienced two prior episodes, those who have high levels of subsyndromal symptoms, or those who remain exposed to multiple-risk circumstances). (B)

7.10.4.2 CAMHS specialists should teach recognition of illness features, early warning signs, and subthreshold disorders to tier 1 professionals, children or young people with recurrent depression and their families and carer(s). Self-management techniques may help individuals to avoid and/or cope with trigger factors. (GPP)

7.10.4.3 When a child or young person with recurrent depression is in remission (less than two symptoms and full functioning for at least 8 weeks) they should be reviewed regularly for 24 months by an experienced CAMHS professional. The exact frequency of contact should be agreed between the CAMHS professional and the child or young person and/or the parent(s) or carer(s) and recorded in the notes. At the end of this period, if remission is maintained, the young person can be discharged to primary care. (C)

7.10.4.4 Children and young people with recurrent depression who have been successfully treated and discharged but then re-referred should be seen as a matter of urgency. (GPP)

7.10.5 Electroconvulsive therapy

7.10.5.1 ECT should only be considered for young people with very severe depression and either life-threatening symptoms (such as suicidal behaviour) or intractable and severe symptoms that have not responded to other treatments. (C)

7.10.5.2 ECT should be used extremely rarely in young people and only after careful assessment by a practitioner experienced in its use and only in a specialist environment in accordance with NICE recommendations. (C)

7.10.5.3 ECT is not recommended in the treatment of depression in **children** (5–11 years). (C)

7.10.6 Pharmacological management of psychotic depression

7.10.6.1 For children and young people with psychotic depression, augmenting the current treatment plan with an atypical antipsychotic medication should be considered, although the optimum dose and duration of treatment are unknown. (C)

7.10.6.2 Children and young people prescribed an atypical antipsychotic medication should be monitored carefully for side effects. (C)

8 Service configurations

8.1 Implications for service configuration

8.1.1 Introduction

The recommendations in this guideline have been devised to take account of the four-tier model of service organisation and are consistent with the National Service Framework (NSF) for Children, and therefore will not require an organisational framework outside of the main structures proposed by the NSF. However, the guidance is likely to have significant implications for service capacity. Depression in children and young people is currently a poorly recognised and under-reported disorder; as the number of children and young people with depression receiving treatment and help increases, so will the workload.

It is important to note that, consistent with current government policy regarding all children's services, the recommendations will have specific implications for healthcare professionals throughout all four tiers, but will also have relevance for non-healthcare professionals involved in the care of children and young people, including some voluntary organisations. This chapter will describe how services for children and young people are organised, highlight some of the problems in the current organisation of services for young people with depression and outline a 'stepped care' model used to structure the care pathway for this guideline. As better functional integration of children's services is a key to both the NSF and this guideline, this chapter will specify referral criteria for the movement of depressed children and young people between tiers, and identify methods of monitoring progress for patients and services.

In addition, the second part will review the current role and the evidence underpinning the use of inpatient units in the treatment of children and young people with depression.

8.1.2 Organisation of services

Interventions for children with depression may be provided by specialist CAMHS, but many children are significantly helped by non-specialist health, social work or education services. In order to recognise the different levels of interventions for many child mental health problems, CAMHS has increasingly been considered to have four main levels, or tiers, of delivery (NHS Health Advisory Service, 1995; see Appendix O). The National Service Framework for Children's Services (Department of Health, 2004), supported by priorities for the CAMHS grant, has defined the key service components for a comprehensive CAMHS that each Primary Care Trust should ensure is in place in each area by 2006. Such comprehensive services should have, at each tier, appropriately trained staff and services which can prevent, identify, and either treat or contribute to the treatment of depression in children and young people. There should also be CAMHS for children with disabilities across all tiers. Where the source of depression may lie with the facts and consequences of their disability, disabled children who suffer from moderate/severe depression should be offered treatment from these specialist CAMHS for children with disabilities. Less severely depressed children with disabilities, where the

depression is not necessarily a consequence of their disability, can be seen in mainstream services. Where some of the interventions proposed such as complex talking therapies, are not feasible to deliver for some disabled children (deaf children for example), then modifications of these interventions should be provided by specialist CAMHS teams for children with disabilities. This may be extremely challenging for services.

Tier 1 services include services that have primary or direct contact with youth, primarily for reasons other than mental health. These services include primary care/general practice, counselling and psychotherapy, general paediatrics, social services, health visitors and schools. Although their primary task is not working with child mental health problems, they are the first point of contact with the child/family with mental health problems.

Tier 1 services should be able to draw on specialist CAMHS personnel who can consult and advise them about working with children and young people in their care who either have, or are at risk of developing, a mental health problem. For some children, additional input from an adult they already know may be more acceptable and effective than referral to specialist services. At this level, an important role is to understand the risks for depression amongst the children in their care, but also to detect those at high risk or those who have succumbed to depression.

Tier 2 services refer to those specialist CAMHS professionals working in a community-based setting alongside tier 1 workers, and therefore work in primary care, schools and other relevant community settings such as social services. Tier 2 staff usually work as a part of a team, with tier 1 staff, built around the individual child. In this position, tier 2 CAMHS professionals can provide fairly rapid assessment and treatment to children within tier 1 settings, as well as consultation/support to tier 1 workers. This is an important means by which less severely depressed children with lower levels of complexity can access help and treatment in a less stigmatising community-based setting. They will also be able to help identify those children needing referral to more specialist services. Often tier 2 professionals are also organised into multidisciplinary teams, with good links to tier 3 services, thereby facilitating a more seamless transition across tiers. It should be noted that sometimes, tier 2 services are provided by the voluntary sector (for example, some but not all adolescent counselling and psychotherapy services).

Tier 3 services comprise multidisciplinary teams of specialist CAMHS professionals working in (secondary care) specialist CAMHS facilities (e.g. Child and Family Consultation Services or Hospital Liaison Teams). The National Service Framework for Children's Services states that all PCT areas should have at least one comprehensive tier 3 multidisciplinary CAMHS team. They should provide specialist co-ordinated assessments and interventions, and should be able to offer the full range of appropriate psychological and pharmacological treatments.

Outreach services should also be available to those young people who are too depressed or housebound to access tier 3 services based in secondary care facilities, or to work in conjunction with outpatient treatment plans (e.g. monitoring of medication). Emergency services, with 24-hour availability should also be in place in all localities.

Importantly, tier 3 professionals can also provide consultation and training to tier 1 workers and refer when necessary to tier 4 services.

Tier 4 services are highly specialised tertiary CAMHS that provide multidisciplinary services for very severe depression (and other serious mental health problems), or for those who need very intensive treatment or supervision. These services vary in how they are organised. Some are acute adolescent or children's inpatient units, day hospitals and specialist treatment centres. Referrals to tier 4 units only come from tier 3 CAMHS professionals, usually a consultant child and adolescent psychiatrist, and patients are discharged back to tier 3 services or outreach services after admission.

Finally, protocols with adult mental health services need to be in place to ensure the smooth transition of young people to adult services when they turn 18. Such protocols need to ensure that access criteria to adult services are consistent with young people who have been previously treated by CAMHS. Adult services also need protocols in place for young people admitted to adult wards, which should include liaison with and involvement of CAMHS.

8.1.3 Problems in the current organisation of services for young people with depression

In the developed countries there is a low spend on mental health services in general compared with other medical services, despite the WHO highlighting the high priority for mental illness services worldwide (World Health Organization, 2001). Within the general mental health budget child mental health services often struggle to find new monies for development. Recently, however, there has been a significant increase in funding for CAMHS, both directly to PCTs and through the CAMHS grant.

Alternative sources of funding in England and Wales can be identified in other public sector services including social services, education and the home office. The emphasis for non-health funds is social care, diminishing the rates of anti-social behaviour in the community and ameliorating the effects of deprivation. Service development for non-health organisations is focused currently on community-based interventions for at risk families, provision of parenting programmes to those with young (generally under 7 years) children, and support for schools through enhancement of the child worker system aimed at behaviourally disturbed children. Although there is an increasing interest in trying to increase CAMHS access to schools – indeed the CAMHS grant can now be used to set up services in tier 2 (including schools and primary care) – the focus of developments in these areas is away from the needs of young people with depression. This is made all the more problematic because, currently, there is a moderate to low priority within NHS commissioning groups to increase funding to tier 3 outpatient services focused on current psychiatric illness in young people.

The structure of CAMHS is highly variable, at least partly as a result of successive re-structuring exercises. For example, CAMHS can be found in primary care trust services, as well as mental health trusts, and some CAMHS have had their services split and inserted into non-NHS organisations. Primary care mental health professionals for children and young people may be employed within PCTs, outside of the tier 3 CAMHS, although with a strong liaison to these colleagues. These arrangements have led to some confusion: currently, 'specialist CAMHS' hospital or clinic-based outpatient and inpatient services are seen as 'mental health', whereas services involving liaison to other resources, such as schools, child protection, prevention and advisory services, are seen as 'community'. In addition, locality-based priorities have increased the plethora of differentiated service provision, but again with an emphasis on a reduction in antisocial behaviour, improving

parenting skills and enhancing child protection. It is perhaps these problems that have, at least in part, led to the development of an NSF for children's services. Indeed, the NSF for children emphasises a more comprehensive and functionally integrated approach, with a target for all local services to increase access to CAMHS by 10% year on year (Department of Health, 2004).

8.1.4 A 'stepped care' approach to organising services

The current arrangement of CAMHS into four tiers lends itself to a 'stepped care' approach. A stepped care model for service delivery starts with service provision being close to a person's home and place of work or education. At this level, patients have the more common and usually milder problems amenable to simpler interventions; the professionals at this level will be operating within primary and community sites. At this level assessment skills are needed for detection, and monitoring progress. When more complex problems present that require skills beyond this level, referral to the next step will be needed, based upon clear and agreed referral criteria. Sometimes interventions will be tried at the lowest step that prove unsuccessful, or the patient's condition becomes worse, then referral should follow, again based upon agreed referral criteria. The higher steps involve increasing specialisation and will be required for the more complex and difficult problems, or for those at higher risk, or where treatment has failed at lower levels.

For CAMHS, the tiered model is, effectively a 'stepped care' approach. However, because the lower tiers (1 and 2) vary geographically, in terms of the services provided and the types of professionals and interventions available in some areas, interventions delivered at tier 2 will be delivered by tier 3, or even tier 1, in another area. This has been accommodated in the care pathway developed for this guideline, and is simply illustrated in Figure 11.

Figure 11: The stepped care model

Focus	Action	Responsibility
Detection	Risk profiling	Tier 1
Recognition	Identification in presenting children or young people	Tiers 2–4
Mild depression (including dysthymia)	Watchful waiting Non-directive supportive therapy/group cognitive behavioural therapy/ guided self-help	Tier 1 Tiers 1 or 2
Moderate to severe depression	Brief psychological therapy +/− Fluoxetine	Tiers 2 or 3
Depression unresponsive to treatment/recurrent depression/psychotic depression	Intensive psychological therapy +/− Fluoxetine, sertraline, citalopram, augmented with an antipsychotic	Tiers 3 or 4

8.1.5 Integrated working across tiers

There are a number of ways that integrated working can be enhanced. In any event, clear protocols for communication between tiers, the provision of training by specialist services for those based in lower tiers and joint planning will be needed. Moreover, it is accepted that, given the different ways in which services are organised, each locality may need to ensure integration in different ways. Some important issues are highlighted below.

8.1.5.1 Liaison and direct input to secondary education

CAMHS tier 2 or 3 staff will be expected to provide training for tier 1 staff. For depression in children and young people, as part of a targeted detection approach, it is recommended that this is particularly focused on pastoral support staff in secondary schools and educational services for young people excluded or non-attending mainstream provision i.e. pupil referral units, home education provision and so on. Depending on local protocols, this training may be inclusive of school nurses, school counsellors, special educational needs co-ordinators and whoever is involved in the identification of troubled young people in the school setting. In addition, it may be appropriate for tier 2 CAMHS to deliver individual or group interventions in the school setting and to provide advice to school staff about young people who may need to be referred to a tier 3 CAMHS team. In order to deliver this service, we recommend that each secondary school and secondary pupil referral unit should have a primary mental health worker (or CAMHS link worker) as part of tier 2 provision within the locality.

8.1.5.2 Links with other services for high-risk groups.

CAMHS provision to services for looked after children and abused children should develop systems for the detection and treatment of depression in this population. Individuals in young offenders' institutions represent a further high-risk group. Refugees and other 'very high-risk groups' detailed in section 4.3.5 require special service provision as do children with disabilities where the depression is arising from this source.

8.1.6 Specialist teams for depression in children and young people?

In order for a tier 3 team to achieve these outputs and to deliver effective and informed psychological therapies, it is essential for a number of clinicians within the service to develop a special interest in mood disorders in children and young people. The exact structure governing how a team will organise themselves with respect to this requirement will vary. In some services it may be appropriate for a team to develop a specialist mood disorders team, whereas in other services a more integrated model of service may be more appropriate. Attention will need to be given to the service interface between management of self-harm, suicide attempts and depression, particularly with respect to the management of children and young people presenting with self-harm at local accident and emergency units.

8.1.7 Referral advice across tiers

To aid in the functional integration of CAMHS using this stepped care model, the following referral advice have been developed by the GDG.

Factors for referral to tier 1

- Exposure to a single uncomplicated undesirable event in the absence of other risk factors for depression
- Exposure to a recent undesirable life event in the presence of two or more other risk factors with no evidence of depression and/or self-harm
- Exposure to a recent undesirable life event in the context of multiple-risk histories for depression in one or more family members (parents or children) providing that there is no evidence of depression and/or self-harm
- Uncomplicated mild depression.

Factors for referral to CAMHS tiers 2 and 3

- Depression with 2 or more other risks for depression
- Depression with multiple risk histories in another family member (parent or siblings)
- Mild depression which has not responded to interventions in tier 1 after 2 to 3 months
- Moderate or severe depression (including psychotic depression)
- Signs of a recurrence of depression in those who have recovered from previous moderate or severe depression
- Unexplained self-neglect of at least 1 month's duration that could be harmful to the physical health of the child/young person
- Actively suicidal ideas or plans in the child/young person.

Factors for referral to CAMHS tier 4

- High recurrent risk of acts of self-harm or suicide
- Significant, ongoing self-neglect (for example, poor personal hygiene, or significant reduction in eating that could be harmful to the physical health of the child/young person)
- Intensity of assessment/treatment and/or level of supervision that is not available in tiers 2/3.

8.1.8 Transfer to adult services

There is considerable geographical variation in the arrangements for transfer of a young person from CAMHS to adult services in England and Wales. This has, in part, resulted from locally negotiated rules regarding the referral process and issues of responsibility in an ever-changing environment. In many areas, existing agreements between CAMHS and adults services work well for all parties; this guidance is most likely to be of use to those areas where agreements are not yet in place.

When a young person reaches 17/18 years of age and is receiving treatment and care from CAMHS, CAMHS should normally continue to provide care in accordance with

this guideline until discharge is considered appropriate. There may be occasions where it is felt that earlier referral may be appropriate and in these circumstances agreement should be made between CAMHS and adult services on an individual case basis. When a young person reaches 18 years of age and is receiving treatment for a second or subsequent episode of depression, the CAMHS should again normally continue to provide care in accordance with this guideline.

CAMHS and adult services should work co-operatively using the care programme approach (as is good practice for transferring across any services), to ensure smooth transfer to the adult service. This approach is especially important for young people with recurrent depression or those with severe and/or psychotic depressions, as these groups are often impaired by symptoms and in addition, their sense of autonomy may be damaged. It is important therefore that on discharge from CAMHS, young people with a history of recurrent severe or psychotic depression, are adequately prepared for transfer and provided with good information about the treatment they may receive under the care of an adult service. Referral to adult services is not normally required for young people recovering from a single uncomplicated episode of mild to moderate depression.

8.1.9 Summary

CAMHS has four main levels, including services that have primary contact with child and young people and their families/carers, specialist services working in the community, multidisciplinary teams working in secondary care and highly specialised tertiary services.

Problems in the current organisation of services include service development for non-health organisations (e.g. schools), variability of services across the country with varying locality-based priorities, confusion about the specific definitions of the tiers (particularly tier 2 or 3).

The tier system lends itself to a stepped care approach with specific foci and actions linked to particular tiers along the care pathway for depression in children and young people. Integrated working across tiers may be enhanced through direct input into secondary education and links with non-mental health services for high-risk groups. Specialist teams within tier 3 for depression in children and young people may enhance the quality of services.

When a young person becomes 18 years of age while receiving treatment and care from CAMHS, CAMHS should continue to provide care in accordance with this guideline. CAMHS and adult services should work co-operatively using the care programme approach to ensure smooth transfer to adult services for those with recurrent depressions. They should prepare young people for transfer and provide good information about treatment for adults, and about local services.

8.2 Inpatient units in the treatment of depression

8.2.1 Introduction

Children and young people with depression are rarely admitted to specialist psychiatric inpatient units, with only approximately 400 admissions per annum in England and

Wales (O'Herlihy *et al*., in press). Often, when admission is considered necessary, there will be no alternative due to the level of risk, use of mental health legislation or a lack of alternative intensive treatments or supervision available in the community.

The research evidence for the efficacy of inpatient treatment is extremely limited for most, if not all, psychiatric problems across the age range, including young people with depression. A systematic review of the literature revealed no randomised controlled trials specifically looking at admission as a treatment modality for depression in children and young people. There are a number of studies using less rigorous research design methods looking at outcomes for this group, but many of these were carried out in the United States where services are configured differently. Most studies using inpatient samples of depressed young people are designed to explore the impact of interventions other than the effect of admission.

The provision of inpatient units for children and young people within England and Wales is variable (O'Herlihy *et al*., 2003). Some inpatient services offer acute admission facilities; some longer-stay therapeutic treatment environments and others attempt to offer both. There are also units that specialise in treating specific disorders, such as anorexia nervosa, but none that specialise solely in the treatment of depression.

Of considerable concern, is the finding in one study in the North West of England, which suggested that for young people with a principal diagnosis of mood disorder, more are admitted to other hospital wards, including adult mental health wards and paediatric wards, than to specialist psychiatric inpatient units for young people (Gowers *et al.*, 2001).

For the purposes of this section, inpatient treatment will refer to specialist child and adolescent psychiatric inpatient provision.

8.2.2 Current practice

8.2.2.1 Indications for admission

Garralda (1986) and Wolkind and Gent (1987) in UK studies, not specific to depression, found criteria for admission included failure of outpatient treatment, difficulties with assessment or diagnosis, family difficulties and the need for 24-hour observation or care. Wrate *et al*., (1994) in a UK multi-centre prospective study looked at reasons for admission in 276 young people admitted to specialised adolescent psychiatric units. The reasons given were: to provide a detailed psychiatric assessment (51%); to establish better therapeutic control of a case (36%); to provide a therapeutic peer group experience (36%); to obtain improved control over the adolescent's behaviour (26%); to relieve outpatient colleagues from a treatment failure (20%); to assess or facilitate future placement needs (19%); to provide relief to exhausted parents (18%); to achieve psychological separation between parents and the patient (17%); and to provide an outpatient with schooling otherwise unavailable (9%).

Further surveys of criteria for admission to inpatient units have been carried out in the US (Costello *et al*., 1991; Pottick *et al.*, 1995). Again, the studies were not specific to depression and generally replicate the UK findings, but also include factors specific to the US, such as the presence of insurance cover (Pottick *et al*., 1995). Costello *et al*. (1991) developed a checklist of criteria which had good predictive value when determining whether or not a child needed admission. However, admission rates in the US are much

higher than the UK, one study suggesting by approximately five times (Maskey, 1998). Clearly, caution is needed in applying such findings to settings in England and Wales.

Admission criteria in the UK continue to vary between individual inpatient units, but generally now fall into three broad categories (see Cotgrove, 2001; Green, 2002).

1. High risk: admission may be indicated when there are high levels of risk to the child/young person, secondary to suicidal thoughts or behaviours or self-neglect, beyond the capacity of the family and community-based services to manage.

2. Intensive treatment: when the intensity of treatment needed is not available from other services. This is more commonly the case when depression is associated with other psychosocial difficulties, and/or comorbid disorder resulting in difficulties pervading all aspects of the child/young person's life.

3. Intensive assessment: an inpatient unit can offer 24-hours-a-day assessment and supervision by a multidisciplinary team to gather information to guide further management. This may involve observing the child/young person's behaviour and their interaction with others, observing the effects of a specific intervention, such as the use of medication, or allowing time for a range of investigations to be carried out, such as cognitive assessments or physical investigations. The admission can also allow for the assessment of the child/young person's difficulties out of the context of their home or school. For example, a young person may appear severely depressed in the context of a problematic home environment or associated with bullying at school, but their mood may lift significantly when admitted. This information can be helpful in guiding future management whether or not further inpatient treatment is indicated. Inpatient assessment may also aid diagnosis. Young people with features of an emerging personality disorder, for example, may present with variable mood, including depression. Evidence of such comorbid disorder can help guide future management.

8.2.2.2 Contra-indications or risks of admission

It is important when considering an admission, that the potential benefits are balanced against potential harm. There is a range of reasons why inpatient treatment may not be appropriate:

- There may be concerns about admitting a particularly vulnerable depressed child/young person into an environment where there were high levels of disturbance potentially compounding their distress

- An impressionable child/young person admitted to an environment with high levels of deliberate self-harm or acting out behaviours is at risk of acquiring additional dysfunctional behaviours or coping strategies, even where a skilled and experienced staff team openly address such difficulties

- If protracted, an admission runs the risk of 'institutionalisation' for the young person, including loss of support from the child's local environment, and detrimental effects on family life (Green & Jones, 1998)

- Inpatient treatments are expensive (e.g. Green *et al.*, 2001).

For these reasons inpatient admission is often considered a last resort.

8.2.3 Evidence of the efficacy of inpatient treatment

Most of the evidence of efficacy of inpatient treatment comes from single sample pre-test, post-test studies with no control or comparison groups. In many of these studies, outcome ratings are made by the treating clinician, introducing the possibility of rater-bias. Inpatient populations tend to be a heterogeneous group with relatively small numbers, hence few studies specifically look at treatment effects of inpatient admissions for young people with depressive disorder. Randomised controlled trials would not be an appropriate design in this context as the need for admission is often a direct consequence of alternatives being either unavailable or involving unacceptable risks. Nevertheless, when competing alternatives are justifiable and available, controlled studies become a possibility.

8.2.3.1 Controlled trials – United States

A small number of controlled trials comparing inpatient treatment with outpatient treatment have been carried out in the United States. Flomenhaft (1974) and Winsberg *et al*. (1980) just looked at young people with anti-social behaviour or externalising disorder.

The most recently published randomised controlled trial (Henggeler *et al.*, 1999) conducted in the US compared a home-based multi-systemic therapy (MST) with brief (1–2 week) inpatient psychiatric hospitalisation. MST offers a range of therapeutic interventions designed to impact on multiple determinants of the young person's key problems arising from the individual, family, peers, school and community. The sample was 113 adolescents, aged 10–17 years, who had been approved for emergency psychiatric hospitalisation. Inclusion criteria included the presence of symptoms of suicidal ideation, homicidal ideation, psychosis, or threat of harm to self or others due to mental illness severe enough to warrant psychiatric hospitalisation. When interpreting the results it is notable that 44% of the 'home-based' treatment sample also received hospitalisation. In addition, it appears that the MST group benefited from a far more intensive individualised therapeutic intervention. Only 15 of the sample received a diagnosis of depression according to the Diagnostic Interview Schedule for Children, so it is not possible to draw significant conclusions about this subgroup. However, hospitalisation was more effective in improving young people's self-esteem. Multi-systemic therapy was more effective in decreasing the young people's externalising (behavioural) symptoms.

8.2.3.2 Other studies – UK

Rothery *et al*. (1995) reviewed outcomes according to a set of 16 predetermined treatment goals and diagnosis in a multi-centre study of 320 consecutive admissions to four specialist adolescent units in the UK. Forty-four did not give consent, leaving 276 in the study. Of the 7% diagnosed (by clinical assessment carried out by the multidisciplinary team) with a 'major depressive illness', 90% were rated as having improved affective symptoms at discharge using a clinician rated 5-point scale.

Sheerin and colleagues (1999) studied a sample of 29 consecutive admissions (results from 26 reported) to a psychiatric inpatient unit for children aged 3–13 years (mean age = 8.6 years) in Scotland. At 3-month and 15-month post-discharge follow-up in a subgroup with depressive symptoms (n = 17), they found a significant reduction in symptoms ($p<0.05$) as rated by the Birleson Depression Scale between admission and at both 3- and 15-month follow-up.

Green and colleagues (2001), in an English study, looked at 55 consecutive admissions of children and adolescents aged 6–17 years (mean 11.4 years) to two inpatient units from late 1995 to 1997. Referrals came from other child mental health specialists. Health gain was inferred from change scores in a range of measures taken at referral, admission, discharge and 6-month follow-up. Measures were made from multiple perspectives, including family, teacher, clinician and an independent researcher. Measures of C-GAS and Health of the Nation Outcome Scale for Children and Adolescents (HoNOSCA) showed no significant changes between referral and admission (waitilist control). Median waiting list time was 3 months. Significant health gain was found on most measures by discharge and sustained at follow-up. The sample included 40% with a primary mood disorder, but no separate analysis is reported for children and adolescents with depressive disorder.

Jacobs and colleagues (2005) have repeated the Green and colleagues (2001) study on a larger scale (n = 155). The sample consisted of sequential admissions of children and adolescents aged 3–17 years (mean 13.9 years) to eight UK inpatient units (four child, four adolescent) between January 2001 and April 2002. Diagnosis at admission was made using the researcher-rated schedule of affective disorders for children (K-SADS). A range of measures was used to monitor symptom change and health gain before admission, during admission and 1 year following discharge. Significant improvements were found in global functioning, psychopathology and 'cardinal problem' measures at discharge, which were maintained at 1-year follow-up. This compared with a much smaller (although still significant) improvement whilst on the waiting list. The findings based on the whole sample analysis remain significant for a subgroup with the diagnosis of depressive disorder. This subgroup is 44 on the basis of the clinicians ICD-10 diagnosis or 66 when the K-SADS is used, illustrating a difference in rates of diagnosis depending on whether diagnosis is based on use of a diagnostic instrument or clinical judgement. Clinical outcome ratings in this study rely largely on treating clinician scores for the C-GAS and the HoNOSCA.

Gowers and colleagues (2000) used the HoNOSCA, a crude outcome measure rated by the treating clinician, on 35 consecutive admissions to an adolescent unit in England. This showed significant reductions in HoNOSCA scores between admission and discharge of 18.0 to 9.3 respectively in clinician-rated scores ($p < 0.001$) and 18.3 to 12.6 respectively in user-rated scores ($p < 0.001$).

8.2.4 Predictors of outcome

Pfeiffer and Strzelecki (1990) carried out a literature search using MEDLINE, the Psychological Information Database and Mental Health Abstracts to look for publications on outcome and follow-up investigations of residential and inpatient psychiatric hospitalisations between 1975 and 1990. Thirty-four studies were identified. When analysing the findings weightings were applied that reflected sample size. These studies were not specific to depression in children and young people. They found a positive relationship between good outcome and the following factors:

- Specific characteristics of treatments (for example, completion of treatment programme, planned discharge and therapeutic alliance)
- The use of after care

- Level of family functioning and involvement with treatment
- Length of stay (longer)
- Higher intelligence.

Some symptom areas were found to be associated with poorer outcomes, such as:

- Presence of psychotic symptoms
- Bizarre symptoms
- Anti-social behaviours
- Under-socialised aggressive conduct disorder.

Kutash and Rivera (1996) carried out a systematic review of subsequent studies using a similar methodology, finding additional support for Pfeiffer and Strzelecki's conclusions and in particular under scoring the benefit of family participation.

More recent studies have confirmed and clarified the following factors as predictors of outcome: length of stay (Sheerin *et al.*, 1999; Green *et al.*, 2001; Jacobs *et al.*, 2005); therapeutic alliance between the child and their family with the inpatient team, and family participation in the therapeutic process (Green *et al.*, 2001; Jacobs *et al.*, 2005); pre-admission family functioning (King *et al.*, 1997; Green *et al.*, 2001); and severity of depressive symptoms (King *et al.*, 1997).

8.2.5 Issues of consent for admission

It is desirable to admit young people with both the informed consent of both the patient and their parents, not least because the success of any treatment approach significantly depends upon the development of a positive therapeutic alliance between the child, the family and the inpatient team. However, there may be times when professionals consider admission to be necessary, but either the young person or the family do not consent.

If a young person below 18 years of age refuses treatment, but the parent (or guardian) believe strongly enough that treatment is desirable, then the young person's wishes may be overruled. On the other hand, a child has the right to consent to treatment after their 16th birthday, or younger, if deemed 'Gillick competent', without involving the consent of the parents. Whilst the use of parental consent is legal, it is now considered good practice to only use parental consent for up to 2 weeks. In other contexts, the use the Mental Health Act 1983 should be considered as it includes safeguards such as the involvement of other professionals, a time limit and a straightforward procedure for appeals and regular reviews.

Alternative legislation includes using a care order (Section 31) under the Children Act 1989 or a specific issue order (Section 8). Both of these options normally involve social services and can be time consuming. Another, more rapid alternative to the Children Act, is to apply for a Wardship Order, which in an emergency can be organised over the phone. It should be noted that at the time of writing, a new Mental Health Bill is under consideration which may alter current practice in this area.

8.2.6 Clinical summary

For some young people and children with depression, particularly those at high risk of self-harm or neglect, or needing intensive assessment and/or treatment, there is often no alternative to inpatient admission. Although there are no randomised control trials specifically looking at psychiatric inpatient admission as a treatment for children and young people with depressive disorder, there are a number of studies using other methodologies suggesting that young people with depression have good outcomes from a period of admission. Clinical factors which appear to predict outcome, include: specific characteristics of treatments (for example, completion of treatment programme, planned discharge and therapeutic alliance), the use of after care, the level of family functioning pre-admission, the level of family involvement with treatment, length of stay (longer), and higher intelligence. Little is known about the impact of service and treatment variables within the inpatient setting.

8.3 Clinical practice recommendations

8.3.1 Service configuration

8.3.1.1 CAMHS and PCTs should consider introducing a primary mental health worker (or CAMHS link worker) into each secondary school and secondary pupil referral unit as part of tier 2 provision within the locality. (GPP)

8.3.1.2 In the provision of training by CAMHS professionals for healthcare professionals in primary care, schools and relevant community settings, priority should be given to the training of pastoral support staff in schools (particularly secondary schools), community paediatricians and GPs. (GPP)

8.3.1.3 Primary mental health workers (or CAMHS link workers) should establish clear lines of communication between CAMHS and tier 1 or 2, with named contact people in each tier or service, and develop systems for the collaborative planning of services for young people with depression in tiers 1 and 2. (GPP)

8.3.1.4 CAMHS and PCTs should routinely monitor the rates of detection, referral and treatment of children and young people, from all ethnic groups, with mental health problems, including those with depression, in local schools and primary care. This information should be used for planning services and made available for local, regional and national comparison. (GPP)

8.3.1.5 All healthcare professionals should routinely use, and record in the notes, appropriate outcome measures (such as those self-report measures used in screening for depression or generic outcome measures used by particular services, for example Health of the Nation Outcome Scale for Children and Adolescents [HoNOSCA] or Strengths and Difficulties Questionnaire [SDQ], for the assessment and treatment of depression in children and young people. This information should be used for planning services, and made available for local, regional and national comparison. (GPP)

8.3.1.6 If children and young people who have previously recovered from moderate or severe depression begin to show signs of a recurrence of depression, healthcare professionals in primary care, schools or other

relevant community settings should refer them to CAMHS tier 2 or 3 for rapid assessment. (GPP)

8.3.2 Referral criteria

It is acknowledged that whilst conforming to the broad principles of a tiered service as suggested in the National Service Framework, local circumstances require different local solutions to the development of a tiered CAMHS. These criteria are intended to provide broad guidance about referral of children and young people to the appropriate CAMHS tier and must be interpreted in the light of local service characteristics. Decisions about referral should always be discussed with the child/young person and their carers whose wishes need to be take into account.

8.3.2.1 For children and young people, the following factors should be used by healthcare professionals as indications that management can remain at tier 1:

- exposure to a single undesirable event in the absence of other risk factors for depression
- exposure to a recent undesirable life event in the presence of two or more other risk factors with no evidence of depression and/or self-harm
- exposure to a recent undesirable life event, where one or more family members (parents or children) have multiple-risk histories for depression, providing that there is no evidence of depression and/or self-harm in the child or young person
- mild depression without comorbidity. (GPP)

8.3.2.2 For children and young people, the following factors should be used by healthcare professionals as criteria for referral to tier 2 or 3 CAMHS:

- depression with two or more other risks for depression
- depression where one or more family members (parents or children) have multiple-risk histories for depression
- mild depression in those who have not responded to interventions in tier 1 after 2 to 3 months
- moderate or severe depression (including psychotic depression)
- signs of a recurrence of depression in those who have recovered from previous moderate or severe depression
- unexplained self-neglect of at least 1 month's duration that could be harmful to their physical health
- active suicidal ideas or plans
- referral requested by a young person or their parent(s) or carer(s). (GPP)

8.3.2.3. For children and young people, the following factors should be used by healthcare professionals as criteria for referral to tier 4 services:

- high recurrent risk of acts of self-harm or suicide
- significant ongoing self-neglect (such as poor personal hygiene or significant reduction in eating that could be harmful to their physical health)
- requirement for intensity of assessment/treatment and/or level of supervision that is not available in tier 2 or 3. (GPP)

8.3.3 Transfer to adult services

8.3.3.1 The CAMHS team currently providing treatment and care for a young person aged 17 who is recovering from a first episode of depression should normally continue to provide treatment until discharge is considered appropriate in accordance with this guideline, even when the person turns 18 years of age. (GPP)

8.3.3.2 The CAMHS team currently providing treatment and care for a young person aged 17–18 who either has ongoing symptoms from a first episode that are not resolving or who has, or is recovering from, a second or subsequent episode of depression should normally arrange for a transfer to adult services, informed by the Care Programme Approach. (GPP)

8.3.3.3 A young person aged 17–18 with a history of recurrent depression who is being considered for discharge from CAMHS should be provided with comprehensive information about the treatment of depression in adults (including the NICE 'Information for the public' version for adult depression) and information about local services and support groups suitable for young adults with depression. (GPP)

8.3.3.4 A young person aged 17–18 who has successfully recovered from a first episode of depression and is discharged from CAMHS should not normally be referred on to adult services, unless they are considered to be at high risk of relapse (for example if they are living in multiple-risk circumstances). (GPP)

8.3.4 Inpatient treatment

8.3.4.1 Most children and young people with depression should be treated on an outpatient or community basis. (C)

8.3.4.2 Inpatient treatment should be considered for children and young people who present with a high risk of suicide, high risk of serious self-harm or high risk of self-neglect, and/or when the intensity of treatment (or supervision) needed is not available elsewhere, or when intensive assessment is indicated. (C)

8.3.4.3 When considering admission for a child or young person with depression, the benefits of inpatient treatment need to be balanced against potential detrimental effects, for example loss of family and community support. (C)

8.3.4.4 When inpatient treatment is indicated, CAMHS professionals should involve the child or young person and their parent(s) or carer(s) in the admission and treatment process whenever possible. (B)

8.3.4.5 Commissioners and strategic health authorities should ensure that inpatient treatment is available within reasonable travelling distance to enable the involvement of families and maintain social links. (B)

8.3.4.6 Commissioners and strategic health authorities should ensure that inpatient services are able to admit a young person within an appropriate timescale, including immediate admission if necessary. (GPP)

8.3.4.7 Inpatient services should have a range of interventions available including medication, individual and group psychological therapies and family support. (C)

8.3.4.8 Inpatient facilities should be age appropriate and culturally enriching with the capacity to provide appropriate educational and recreational activities. (C)

8.3.4.9 Planning for aftercare arrangements should take place before admission or as early as possible after admission and should be based on the Care Programme Approach. (GPP)

8.3.4.10 Tier 4 CAMHS professionals involved in assessing children or young people for possible inpatient admission should be specifically trained in issues of consent and capacity, the use of current mental health legislation, and the use of childcare laws, as they apply to this group of patients. (GPP)

9 Summary of recommendations

9.1 Key recommendations for implementation

9.1.1 Assessment and coordination of care

When assessing a child or young person with depression, healthcare professionals should routinely consider, and record in the patient's notes, potential comorbidities, and the social, educational and family context for the patient and family members, including the quality of interpersonal relationships, both between the patient and other family members and with their friends and peers.

9.1.2 Treatment considerations in all settings

Psychological therapies used in the treatment of children and young people should be provided by therapists who are also trained child and adolescent mental healthcare professionals.

Comorbid diagnoses and developmental, social and educational problems should be assessed and managed, either in sequence or in parallel, with the treatment for depression. Where appropriate this should be done through consultation and alliance with a wider network of education and social care.

Attention should be paid to the possible need for parents' own psychiatric problems (particularly depression) to be treated in parallel, if the child or young person's mental health is to improve. If such a need is identified, then a plan for obtaining such treatment should be made, bearing in mind the availability of adult mental health provision and other services.

9.1.3 Step 1: Detection and risk profiling

Healthcare professionals in primary care, schools and other relevant community settings should be trained to detect symptoms of depression, and to assess children and young people who may be at risk of depression. Training should include the evaluation of recent and past psychosocial risk factors, such as age, gender, family discord, bullying, physical, sexual or emotional abuse, comorbid disorders, including drug and alcohol use, and a history of parental depression; the natural history of single loss events; the importance of multiple risk factors; ethnic and cultural factors; and factors known to be associated with a high risk of depression and other health problems, such as homelessness, refugee status and living in institutional settings.

CAMHS tier 2 or 3 should work with health and social care professionals in primary care, schools and other relevant community settings to provide training and develop ethnically and culturally sensitive systems for detecting, assessing, supporting and referring children and young people who are either depressed or at significant risk of becoming depressed.

9.1.4 Step 2: Recognition

Training opportunities should be made available to improve the accuracy of CAMHS professionals in diagnosing depressive conditions. The existing interviewer-based

instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) could be used for this purpose but will require modification for regular use in busy routine CAMHS settings.

9.1.5 Step 3: Mild depression

Antidepressant medication should not be used for the initial treatment of children and young people with mild depression.

9.1.6 Steps 4 and 5: Moderate to severe depression

Children and young people with moderate to severe depression should be offered, as a first-line treatment, a specific psychological therapy (individual CBT, interpersonal therapy or shorter-term family therapy; it is suggested that this should be for at least 3 months' duration).

Antidepressant medication should not be offered to a child or young person with moderate to severe depression except in combination with a concurrent psychological therapy. Specific arrangements must be made for careful monitoring of adverse drug reactions, as well as for reviewing mental state and general progress; for example, weekly contact with the child or young person and their parent(s) or carer(s) for the first 4 weeks of treatment. The precise frequency will need to be decided on an individual basis, and recorded in the notes. In the event that psychological therapies are declined, medication may still be given, but as the young person will not be reviewed at psychological therapy sessions, the prescribing doctor should closely monitor the child or young person's progress on a regular basis and focus particularly on emergent adverse drug reactions.

9.2 Guidance

The following guidance is evidence based. The grading scheme used for the recommendations (A, B, C, good practice points [GPP]) is described in Chapter 2; a summary of the evidence on which the guidance is based is provided in Chapters 4–8.

9.3 Care of all children and young people with depression

9.3.1 Good information, informed consent and support

Children and young people and their families need good information, given as part of a collaborative and supportive relationship with healthcare professionals, and need to be able to give fully informed consent.

9.3.1.1 Healthcare professionals involved in the detection, assessment or treatment of children or young people with depression should ensure that information is provided to the patient and their parent(s) and carer(s) at an appropriate time. The information should be age appropriate and should cover the nature, course and treatment of depression, including the likely side-effect profile of medication should this be offered. (GPP)

9.3.1.2 Healthcare professionals involved in the treatment of children or young people with depression should take time to build a supportive and collaborative relationship with both the patient and the family or carers. (GPP)

9.3.1.3 Healthcare professionals should make all efforts necessary to engage the child or young person and their parent(s) or carer(s) in treatment decisions, taking full account of patient and parental/carer expectations, so that the patient and their parent(s) or carer(s) can give meaningful and properly informed consent before treatment is initiated. (GPP)

9.3.1.4 Families and carers should be informed of self-help groups and support groups and be encouraged to participate in such programmes where appropriate. (GPP)

9.3.2 Language and ethnic minorities

Information should be provided in a language and format that a child or young person and their family or carer(s) can properly understand; interpreters should be engaged when needed. Psychological treatments are also best conducted in the child or young person's first language. Healthcare professionals should be trained to understand the specific needs of depressed children or young people from black and minority ethnic groups. Patients, families and carers, including those from black and minority ethnic groups, should be involved in planning services.

9.3.2.1 Where possible, all services should provide written information or audiotaped material in the language of the child or young person and their family or carer(s), and professional interpreters should be sought for those whose preferred language is not English. (GPP)

9.3.2.2 Consideration should be given to providing psychological therapies and information about medication and local services in the language of the child or young person and their family or carers where the patient's and/or their family's or carer's first language is not English. If this is not possible, an interpreter should be sought. (GPP)

9.3.2.3 Healthcare professionals in primary, secondary and relevant community settings should be trained in cultural competence to aid in the diagnosis and treatment of depression in children and young people from black and minority ethnic groups. This training should take into consideration the impact of the patient's and healthcare professional's racial identity status on the patient's depression. (GPP)

9.3.2.4 Healthcare professionals working with interpreters should be provided with joint training opportunities with those interpreters, to ensure that both healthcare professionals and interpreters understand the specific requirements of interpretation in a mental health setting. (GPP)

9.3.2.5 The development and evaluation of services for children and young people with depression should be undertaken in collaboration with stakeholders involving patients and their families and carers, including members of black and minority ethnic groups. (GPP)

9.3.3 Assessment and coordination of care

The assessment of children and young people should be comprehensive and holistic, taking into account drug and alcohol use, the risks of self-harm and suicidal ideations, and the use of self-help materials and methods. Parental depression may be an important contributing factor and needs to be identified.

9.3.3.1 When assessing a child or young person with depression, healthcare professionals should routinely consider, and record in the patient's notes, potential comorbidities, and the social, educational and family context for the patient and family members, including the quality of interpersonal relationships, both between the patient and other family members and with their friends and peers. (GPP)

9.3.3.2 In the assessment of a child or young person with depression, healthcare professionals should always ask the patient and their parent(s) or carer(s) directly about the child or young person's alcohol and drug use, any experience of being bullied or abused, self-harm and ideas about suicide. A young person should be offered the opportunity to discuss these issues initially in private. (GPP)

9.3.3.3 If a child or young person with depression presents acutely having self-harmed, the immediate management should follow the NICE guideline 'Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care' (www.nice.org.uk/CG016) as this applies to children and young people, paying particular attention to the guidance on consent and capacity. Further management should then follow this depression guideline. (GPP)

9.3.3.4 In the assessment of a child or young person with depression, healthcare professionals should always ask the patient, and be prepared to give advice, about self-help materials or other methods used or considered potentially helpful by the patient or their parent(s) or carer(s). This may include educational leaflets, helplines, self-diagnosis tools, peer, social and family support groups, complementary therapies, and religious and spiritual groups. (GPP)

9.3.3.5 Health professionals should only recommend self-help materials or strategies as part of a supported and planned package of care. (GPP)

9.3.3.6 For any child or young person with suspected mood disorder, a family history should be obtained to check for unipolar or bipolar depression in parents and grandparents. (GPP)

9.3.3.7 When a child or young person has been diagnosed with depression, consideration should be given to the possibility of parental depression, parental substance misuse, or other mental health problems and associated problems of living, as these are often associated with depression in a child or young person and, if untreated, may have a negative impact on the success of treatment offered to the child or young person. (GPP)

9.3.3.8 When the clinical progress of children and young people with depression is being monitored in secondary care, the self-report Mood and Feelings

Questionnaire (MFQ), should be considered as an adjunct to clinical judgement. (C)

9.3.3.9 In the assessment and treatment of depression in children and young people, special attention should be paid to the issues of:

- confidentiality
- the young person's consent (including Gillick competence)
- parental consent
- child protection
- the use of the Mental Health Act in young people
- the use of the Children Act. (GPP)

9.3.3.10 The form of assessment should take account of cultural and ethnic variations in communication, family values and the place of the child or young person within the family. (GPP)

9.3.4 The organisation and planning of services

Better links between CAMHS and tier 1 and tier 2 are needed to improve detection and availability of treatment. All healthcare professionals should monitor detection rates and record outcomes for local planning and local, regional and national comparison.

9.3.4.1 Healthcare professionals specialising in depression in children and young people should work with local CAMHS to enhance specialist knowledge and skills regarding depression in these existing services. This work should include providing training and help with guideline implementation. (GPP)

9.3.4.2 CAMHS and PCTs should consider introducing a primary mental health worker (or CAMHS link worker) into each secondary school and secondary pupil referral unit as part of tier 2 provision within the locality. (GPP)

9.3.4.3 Primary mental health workers (or CAMHS link workers) should establish clear lines of communication between CAMHS and tier 1 or 2, with named contact people in each tier or service, and develop systems for the collaborative planning of services for young people with depression in tiers 1 and 2. (GPP)

9.3.4.4 CAMHS and PCTs should routinely monitor the rates of detection, referral and treatment of children and young people, from all ethnic groups, with mental health problems, including those with depression, in local schools and primary care. This information should be used for planning services and made available for local, regional and national comparison. (GPP)

9.3.4.5 All healthcare professionals should routinely use, and record in the notes, appropriate outcome measures (such as those self-report measures used in

screening for depression or generic outcome measures used by particular services, for example Health of the Nation Outcome Scale for Children and Adolescents [HoNOSCA] or Strengths and Difficulties Questionnaire [SDQ]), for the assessment and treatment of depression in children and young people. This information should be used for planning services, and made available for local, regional and national comparison. (GPP)

9.3.5 Treatment considerations in all settings

Most treatment should be undertaken in outpatient settings or the community. Before treatment is started the social networks around the child or young person need to be clearly identified. If bullying is a factor, school and healthcare professionals should jointly develop antibullying strategies. Psychological treatments should be provided by professionally trained therapists, who should aim to quickly develop an alliance with the child or young person and their family or carer(s). Comorbid conditions will also need to be treated and interventions considered for parents with depression or other significant personal problems. Advice about exercise, sleep and nutrition should also be considered.

9.3.5.1 Most children and young people with depression should be treated on an outpatient or community basis. (C)

9.3.5.2 Before any treatment is started, healthcare professionals should assess, together with the young person, the social network around him or her. This should include a written formulation, identifying factors that may have contributed to the development and maintenance of depression, and that may impact both positively or negatively on the efficacy of the treatments offered. The formulation should also indicate ways that the healthcare professionals may work in partnership with the social and professional network of the young person. (B)

9.3.5.3 When bullying is considered to be a factor in a child or young person's depression, CAMHS, primary care and educational professionals should work collaboratively to prevent bullying and to develop effective antibullying strategies. (C)

9.3.5.4 Psychological therapies used in the treatment of children and young people with depression should be provided by therapists who are also trained child and adolescent mental healthcare professionals. (B)

9.3.5.5 Psychological therapies used in the treatment of children and young people with depression should be provided by healthcare professionals who have been trained to an appropriate level of competence in the specific modality of psychological therapy being offered. (C)

9.3.5.6 Therapists should develop a treatment alliance with the family. If this proves difficult, consideration should be given to providing the family with an alternative therapist. (C)

9.3.5.7 Comorbid diagnoses and developmental, social and educational problems should be assessed and managed, either in sequence or in parallel, with the treatment for depression. Where appropriate this should be done

through consultation and alliance with a wider network of education and social care. (B)

9.3.5.8 Attention should be paid to the possible need for parents' own psychiatric problems (particularly depression) to be treated in parallel, if the child or young person's mental health is to improve. If such a need is identified, then a plan for obtaining such treatment should be made, bearing in mind the availability of adult mental health provision and other services. (B)

9.3.5.9 A child or young person with depression should be offered advice on the benefits of regular exercise and encouraged to consider following a structured and supervised exercise programme of typically up to three sessions per week of moderate duration (45 minutes to 1 hour) for between 10 and 12 weeks. (C)

9.3.5.10 A child or young person with depression should be offered advice about sleep hygiene and anxiety management. (C)

9.3.5.11 A child or young person with depression should be offered advice about nutrition and the benefits of a balanced diet. (GPP)

9.4 Stepped care

The stepped-care model of depression draws attention to the different needs that depressed children and young people have – depending on the characteristics of their depression and their personal and social circumstances – and the responses that are required from services. It provides a framework in which to organise the provision of services that support both healthcare professionals and patients and their parent(s) or carer(s) in identifying and accessing the most effective interventions (see Table 20).

Table 20: The stepped-care model

Focus	Action	Responsibility
Detection	Risk profiling	Tier 1
Recognition	Identification in presenting children or young people	Tiers 2–4
Mild depression (including dysthymia)	Watchful waiting Non-directive supportive therapy/group cognitive behavioural therapy/guided self-help	Tier 1 Tiers 1 or 2
Moderate to severe depression	Brief psychological therapy +/− fluoxetine	Tiers 2 or 3
Depression unresponsive to treatment/recurrent depression/psychotic depression	Intensive psychological therapy +/− fluoxetine, sertraline, citalopram, augmentation with an antipsychotic	Tiers 3 or 4

The guidance follows these five steps.

1. Detection and recognition of depression and risk profiling in primary care and community settings

2. Recognition of depression in children and young people referred to CAMHS

3. Managing recognised depression in primary care and community settings – mild depression

4. Managing recognised depression in tier 2 or 3 CAMHS – moderate to severe depression

5. Managing recognised depression in tier 3 or 4 CAMHS – unresponsive, recurrent and psychotic depression, including depression needing inpatient care.

Each step introduces additional interventions; the higher steps assume interventions in the previous step.

9.5 Step 1: Detection, risk profiling and referral

Healthcare professionals working with children or young people in primary care, schools and the community need training to assess the risk of depression, to provide emotional support and know when to refer, especially when a child or young person has experienced an undesirable life event. CAMHS tier 2 or 3 should work with tier 1 healthcare professionals and help provide training in the recognition of depression.

9.5.1 Detection and risk profiling

9.5.1.1 Healthcare professionals in primary care, schools and other relevant community settings should be trained to detect symptoms of depression, and to assess children and young people who may be at risk of depression. Training should include the evaluation of recent and past psychosocial risk factors, such as age, gender, family discord, bullying, physical, sexual or emotional abuse, comorbid disorders, including drug and alcohol use, and a history of parental depression; the natural history of single loss events; the importance of multiple risk factors; ethnic and cultural factors; and factors known to be associated with a high risk of depression and other health problems, such as homelessness, refugee status and living in institutional settings. (C)

9.5.1.2 Healthcare professionals in primary care, schools and other relevant community settings should be trained in communications skills such as 'active listening' and 'conversational technique', so that they can deal confidently with acute sadness and distress ('situational dysphoria') encountered in children and young people following recent undesirable events. (GPP)

9.5.1.3 Healthcare professionals in primary care settings should be familiar with screening for mood disorders. They should have regular access to specialist supervision and consultation. (GPP)

9.5.1.4 Healthcare professionals in primary care, schools and other relevant community settings who are providing support for a child or young person with situational dysphoria should consider ongoing social and environmental factors if the dysphoria becomes more persistent. (GPP)

9.5.1.5 CAMHS tier 2 or 3 should work with health and social care professionals in primary care, schools and other relevant community settings to provide training and develop ethnically and culturally sensitive systems for detecting, assessing, supporting and referring children and young people who are either depressed or at significant risk of becoming depressed. (GPP)

9.5.1.6 In the provision of training by CAMHS professionals for healthcare professionals in primary care, schools and relevant community settings, priority should be given to the training of pastoral support staff in schools (particularly secondary schools), community paediatricians and GPs. (GPP)

9.5.1.7 When a child or young person is exposed to a single recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, healthcare professionals in primary care, schools or other relevant community settings should undertake an assessment of the risks of depression associated with the event and make contact with their parent(s) or carer(s) to help integrate parental/carer and professional responses. The risk profile should be recorded in the child or young person's records. (C)

9.5.1.8 When a child or young person is exposed to a single recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, in the absence of other risk factors for depression, healthcare professionals in primary care, schools and other relevant community settings should offer support and the opportunity to talk over the event with the child or young person. (GPP)

9.5.1.9 Following an undesirable event, a child or young person should not normally be referred for further assessment or treatment, as single events are unlikely to lead to a depressive illness. (C)

9.5.1.10 A child or young person who has been exposed to a recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience and is identified to be at high risk of depression (the presence of two or more other risk factors for depression) should be offered the opportunity to talk over their recent negative experiences with a professional in tier 1 and assessed for depression. Early referral should be considered if there is evidence of depression and/or self-harm. (GPP)

9.5.1.11 When a child or young person is exposed to a recent undesirable life event, such as bereavement, parental divorce or separation or a severely disappointing experience, and where one or more family members (parents or children) have multiple-risk histories for depression, they should be offered the opportunity to talk over their recent negative

experiences with a professional in tier 1 and assessed for depression. Early referral should be considered if there is evidence of depression and/or self-harm. (GPP)

9.5.1.12 If children and young people who have previously recovered from moderate or severe depression begin to show signs of a recurrence of depression, healthcare professionals in primary care, schools or other relevant community settings should refer them to CAMHS tier 2 or 3 for rapid assessment. (GPP)

9.5.2 Referral criteria

9.5.2.1 For children and young people, the following factors should be used by healthcare professionals as indications that management can remain at tier 1:

- exposure to a single undesirable event in the absence of other risk factors for depression
- exposure to a recent undesirable life event in the presence of two or more other risk factors with **no** evidence of depression and/or self-harm
- exposure to a recent undesirable life event, where one or more family members (parents or children) have multiple-risk histories for depression, providing that there is **no** evidence of depression and/or self-harm in the child or young person
- mild depression without comorbidity. (GPP)

9.5.2.2 For children and young people, the following factors should be used by healthcare professionals as referral criteria to tier 2 or 3 CAMHS:

- depression with two or more other risks for depression
- depression where one or more family members (parents or children) have multiple risk histories for depression
- mild depression in those who have not responded to interventions in tier 1 after 2 to 3 months
- moderate or severe depression (including psychotic depression)
- signs of a recurrence of depression in those who have recovered from previous moderate or severe depression
- unexplained self-neglect of at least 1 month's duration that could be harmful to their physical health
- active suicidal ideas or plans
- referral requested by a young person or their parent(s) or carer(s). (GPP)

9.5.2.3 For children and young people, the following factors should be used by healthcare professionals as criteria for referral to tier 4 services:

- high recurrent risk of acts of self-harm or suicide
- significant ongoing self-neglect (such as poor personal hygiene or significant reduction in eating that could be harmful to their physical health)
- requirement for intensity of assessment/treatment and/or level of supervision that is not available in tier 2 or 3. (GPP)

9.6 Step 2: Recognition

CAMHS professionals need to improve their ability to recognise depression.

9.6.1.1 Children and young people of 11 years or older referred to CAMHS without a diagnosis of depression should be routinely screened with a self-report questionnaire for depression (of which the Mood and Feelings Questionnaire [MFQ] is currently the best) as part of a general assessment procedure. (B)

9.6.1.2 Training opportunities should be made available to improve the accuracy of CAMHS professionals in diagnosing depressive conditions. The existing interviewer-based instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) could be used for this purpose but will require modification for regular use in busy routine CAMHS settings. (C)

9.6.1.3 Within tier 3 CAMHS, professionals who specialise in the treatment of depression should have been trained in interviewer-based assessment instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) and have skills in non-verbal assessments of mood in younger children. (GPP)

9.7 Step 3: Mild depression

Some children and young people diagnosed with mild depression may not need or want a specific intervention, but they need to be monitored and followed up, especially if they miss appointments.

9.7.1 Watchful waiting

9.7.1.1 For children and young people with diagnosed mild depression who do not want an intervention or who, in the opinion of the healthcare professional, may recover with no intervention, a further assessment should be arranged, normally within 2 weeks ('watchful waiting'). (C)

9.7.1.2 Healthcare professionals should make contact with children and young people with depression who do not attend follow-up appointments. (C)

9.7.2 Interventions for mild depression

After up to 4 weeks of watchful waiting, children and young people with continuing mild depression should be offered a course of non-directive supportive therapy, group CBT or guided self-help. Ideally this should be offered by appropriately trained professionals in tier 1 (primary care, schools, social services and the voluntary sector) but may require a referral to tier 2 CAMHS depending on local resources. If this is ineffective within 2 to 3 months, they should be referred for assessment by a tier 2 or 3 CAMHS team. Antidepressant medication should not be used in the initial treatment of mild depression.

9.7.2.1 Following a period of up to 4 weeks of watchful waiting, all children and young people with continuing mild depression and without significant comorbid problems or signs of suicidal ideation should be offered individual non-directive supportive therapy, group CBT or guided self-help for a limited period (approximately 2 to 3 months). This could be provided by appropriately trained professionals in primary care, schools, social services and the voluntary sector or in tier 2 CAMHS. (B)

9.7.2.2 Children and young people with mild depression who do not respond after 2 to 3 months to non-directive supportive therapy, group CBT or guided self-help should be referred for review by a tier 2 or 3 CAMHS team. (GPP)

9.7.2.3 Antidepressant medication should not be used for the initial treatment of children and young people with mild depression. (B)

9.7.2.4 The further treatment of children and young people with persisting mild depression unresponsive to treatment at tier 1 or 2 should follow the guidance for moderate to severe depression. (GPP)

9.8 Steps 4 and 5: Moderate to severe depression

There is little research evidence on the effectiveness of treatments for the younger child (5–11 years) with moderate to severe depression. In particular, there is little evidence for the effectiveness of antidepressant medication in children, which should, therefore, only be used very cautiously in this age group. In other respects, the recommended treatments for children are based upon the evidence for effectiveness in young people (12–18 years).

In children and young people psychological therapies are the first-line treatments.

9.8.1 Treatments for moderate to severe depression

All children and young people with moderate to severe depression should be assessed by CAMHS tier 2 or 3 professionals and offered a specific psychological therapy as a first-line treatment.

9.8.1.1 Children and young people presenting with moderate to severe depression should be reviewed by a CAMHS tier 2 or 3 team. (B)

9.8.1.2 Children and young people with moderate to severe depression should be offered, as a first-line treatment, a specific psychological therapy (individual CBT, interpersonal therapy or shorter-term family therapy); it is suggested that this should be of at least 3 months' duration. (B)

9.8.2 Combined treatments for moderate to severe depression

If there is no response to a specific psychological therapy within four to six sessions, then review and consider alternative or additional psychological therapies for coexisting problems. Consider combining psychological therapy with fluoxetine (cautiously in younger children). If combined treatment is not effective within a further six sessions, review and consider more intensive psychological therapy.

9.8.2.1 If moderate to severe depression in a child or young person is unresponsive to psychological therapy after four to six treatment sessions, a multidisciplinary review should be carried out. (GPP)

9.8.2.2 Following multidisciplinary review, if the child or young person's depression is not responding to psychological therapy as a result of other coexisting factors such as the presence of comorbid conditions, persisting psychosocial risk factors such as family discord, or the presence of parental mental ill-health, alternative or perhaps additional psychological therapy for the parent or other family members, or alternative psychological therapy for the patient, should be considered. (C)

9.8.2.3 Following multidisciplinary review, if moderate to severe depression in a **young person** (12–18 years) is unresponsive to a specific psychological therapy after four to six sessions, fluoxetine should be offered. (B)

9.8.2.4 Following multidisciplinary review, if moderate to severe depression in a **child** (5–11 years) is unresponsive to a specific psychological therapy after four to six sessions, the addition of fluoxetine should be **cautiously** considered, although the evidence for its effectiveness in this age group is not established. (C)

9.8.3 Depression unresponsive to combined treatment

9.8.3.1 If moderate to severe depression in a child or young person is unresponsive to combined treatment with a specific psychological therapy and fluoxetine after a further six sessions, or the patient and/or their parent(s) or carer(s) have declined the offer of fluoxetine, the multidisciplinary team should make a full needs and risk assessment. This should include a review of the diagnosis, examination of the possibility of comorbid diagnoses, reassessment of the possible individual, family and social causes of depression, consideration of whether there has been a fair trial of treatment, and assessment for further psychological therapy for the patient and/or additional help for the family. (GPP)

9.8.3.2 Following multidisciplinary review, the following should be considered:

- an alternative psychological therapy which has not been tried previously (individual CBT, interpersonal therapy or shorter-term family therapy, of at least 3 months' duration) or
- systemic family therapy (at least 15 fortnightly sessions) or
- individual child psychotherapy (approximately 30 weekly sessions). (B)

9.8.4 How to use antidepressants in children and young people

All antidepressant drugs have significant risks when given to children and young people with depression and, with the exception of fluoxetine, there is little evidence that they are effective in this context. Although fluoxetine can cause significant adverse drug reactions, it is safer when combined with psychological therapies. The following guidance outlines how fluoxetine should be used, and suggests possible alternatives in the event that fluoxetine is ineffective or not tolerated because of side effects.

9.8.4.1 Antidepressant medication should not be offered to a child or young person with moderate to severe depression except in combination with a concurrent psychological therapy. Specific arrangements must be made for careful monitoring of adverse drug reactions, as well as for reviewing mental state and general progress; for example, weekly contact with the child or young person and their parent(s) or carer(s) for the first 4 weeks of treatment. The precise frequency will need to be decided on an individual basis, and recorded in the notes. In the event that psychological therapies are declined, medication may still be given, but as the young person will not be reviewed at psychological therapy sessions, the prescribing doctor should closely monitor the child or young person's progress on a regular basis and focus particularly focus on emergent adverse drug reactions. (B)

9.8.4.2 If an antidepressant is to be prescribed this should only be following assessment and diagnosis by a child and adolescent psychiatrist. (C)

9.8.4.3 When an antidepressant is prescribed to a child or young person with moderate to severe depression, it should be fluoxetine as this is the only antidepressant for which clinical trial evidence shows that the benefits outweigh the risks. (A)

9.8.4.4 If a child or young person is started on antidepressant medication, they (and their parent(s) or carer(s) as appropriate) should be informed about the rationale for the drug treatment, the delay in onset of effect, the time course of treatment, the possible side effects, and the need to take the medication as prescribed. Discussion of these issues should be supplemented by written information appropriate to the child or young person's and parents' or carers' needs that covers the issues described above and includes the latest patient information advice from the relevant regulatory authority. (GPP)

9.8.4.5 A child or young person prescribed an antidepressant should be closely monitored for the appearance of suicidal behaviour, self-harm or hostility, particularly at the beginning of treatment, by the prescribing doctor and the healthcare professional delivering the psychological therapy. Unless it is felt that medication needs to be started immediately, symptoms that might be subsequently interpreted as side effects should be monitored for 7 days before prescribing. Once medication is started the patient and their parent(s) or carer(s) should be informed that if there is any sign of new symptoms of these kinds, urgent contact should be made with the prescribing doctor. (GPP)

9.8.4.6 When fluoxetine is prescribed to a child or young person with depression, the starting dose should be 10 mg daily. This can be increased to 20 mg daily after 1 week if clinically necessary, although lower doses should be considered

in children with lower body weight. There is little evidence regarding the effectiveness of doses higher than 20 mg daily. However, higher doses may be considered in older children of higher body weight and/or when, in severe illness an early clinical response is considered a priority. (GPP)

9.8.4.7 When an antidepressant is prescribed in the treatment of a child or young person with depression, and a self-report rating scale is used as an adjunct to clinical judgement, this should be a recognised scale such as the Mood and Feelings Questionnaire (MFQ). (GPP)

9.8.4.8 When a child or young person responds to treatment with fluoxetine, medication should be continued for at least 6 months after remission (defined as no symptoms and full functioning for at least 8 weeks); in other words, for 6 months after this 8-week period. (C)

9.8.4.9 If treatment with fluoxetine is unsuccessful or is not tolerated because of side effects, consideration should be given to the use of another antidepressant. In this case sertraline or citalopram are the recommended second-line treatments. (B)

9.8.4.10 Sertraline or citalopram should only be used when the following criteria have been met.

- The child or young person and their parent(s) or carer(s) have been fully involved in discussions about the likely benefits and risks of the new treatment and have been provided with appropriate written information. This information should cover the rationale for the drug treatment, the delay in onset of effect, the time course of treatment, the possible side effects, and the need to take the medication as prescribed; it should also include the latest patient information advice from the relevant regulatory authority

- The child or young person's depression is sufficiently severe and/or causing sufficiently serious symptoms (such as weight loss or suicidal behaviour) to justify a trial of another antidepressant

- There is clear evidence that there has been a fair trial of the combination of fluoxetine and a psychological therapy (in other words that all efforts have been made to ensure adherence to the recommended treatment regimen)

- There has been a reassessment of the likely causes of the depression and of treatment resistance (for example other diagnoses such as bipolar disorder or substance abuse)

- There has been advice from a senior child and adolescent psychiatrist – usually a consultant

- The child or young person and/or someone with parental responsibility for the child or young person (or the young person alone, if over 16 or deemed competent) has signed an appropriate and valid consent form. (C)

9.8.4.11 When a child or young person responds to treatment with citalopram or sertraline, medication should be continued for at least 6 months after remission (defined as no symptoms and full functioning for at least 8 weeks). (C)

9.8.4.12 When an antidepressant other than fluoxetine is prescribed for a child or young person with depression, the starting dose should be half the daily starting dose for adults. This can be gradually increased to the daily dose for adults over the next 2 to 4 weeks if clinically necessary, although lower doses should be considered in children with lower body weight. There is little evidence regarding the effectiveness of the upper daily doses for adults in children and young people, but these may be considered in older children of higher body weight and/or when, in severe illness, an early clinical response is considered a priority. (GPP)

9.8.4.13 Paroxetine and venlafaxine should not be used for the treatment of depression in children and young people. (A)

9.8.4.14 Tricyclic antidepressants should not be used in the treatment of depression in children and young people. (C)

9.8.4.15 Where antidepressant medication is to be discontinued, the drug should be phased out over a period of 6 to 12 weeks with the exact dose being titrated against the level of discontinuation/withdrawal symptoms. (C)

9.8.4.16 As with all other medications, consideration should be given to possible drug interactions when prescribing medication for depression in children and young people. This should include possible interactions with complementary and alternative medicines as well as with alcohol and 'recreational' drugs. (GPP)

9.8.4.17 Although there is some evidence that St John's wort may be of some benefit in adults with mild to moderate depression, this cannot be assumed for children or young people, for whom there are no trials upon which to make a clinical decision. Moreover, it has an unknown side-effect profile and is known to interact with a number of other drugs, including contraceptives. Therefore St John's wort should not be prescribed for the treatment of depression in children and young people. (C)

9.8.4.18 A child or young person with depression who is taking St John's wort as an over-the-counter preparation should be informed of the risks and advised to discontinue treatment while being monitored for recurrence of depression and assessed for alternative treatments in accordance with this guideline. (C)

9.8.5 The treatment of psychotic depression

9.8.5.1 For children and young people with psychotic depression, augmenting the current treatment plan with an atypical antipsychotic medication should be considered, although the optimum dose and duration of treatment are unknown. (C)

9.8.5.2 Children and young people prescribed an atypical antipsychotic medication should be monitored carefully for side effects. (C)

9.8.6 Inpatient care

Inpatient treatment for children and young people with depression should only be considered when the patient is at significant risk of self-harm and/or needs intensive treatment or supervision not available elsewhere. The following guidance outlines the use of inpatient facilities.

9.8.6.1 Inpatient treatment should be considered for children and young people who present with a high risk of suicide, high risk of serious self-harm or high risk of self-neglect, and/or when the intensity of treatment (or supervision) needed is not available elsewhere, or when intensive assessment is indicated. (C)

9.8.6.2 When considering admission for a child or young person with depression, the benefits of inpatient treatment need to be balanced against potential detrimental effects, for example loss of family and community support. (C)

9.8.6.3 When inpatient treatment is indicated, CAMHS professionals should involve the child or young person and their parent(s) or carer(s) in the admission and treatment process whenever possible. (B)

9.8.6.4 Commissioners and strategic health authorities should ensure that inpatient treatment is available within reasonable travelling distance to enable the involvement of families and maintain social links. (B)

9.8.6.5 Commissioners and strategic health authorities should ensure that inpatient services are able to admit a young person within an appropriate timescale, including immediate admission if necessary. (GPP)

9.8.6.6 Inpatient services should have a range of interventions available including medication, individual and group psychological therapies and family support. (C)

9.8.6.7 Inpatient facilities should be age appropriate and culturally enriching, with the capacity to provide appropriate educational and recreational activities. (C)

9.8.6.8 Planning for aftercare arrangements should take place before admission or as early as possible after admission and should be based on the Care Programme Approach. (GPP)

9.8.6.9 Tier 4 CAMHS professionals involved in assessing children or young people for possible inpatient admission should be specifically trained in issues of consent and capacity, the use of current mental health legislation, and the use of childcare laws, as they apply to this group of patients. (GPP)

9.8.7 Electroconvulsive therapy (ECT)

Electroconvulsive therapy (ECT) should be reserved for life-threatening depression unresponsive to other treatments in young people. If it is used, ECT should be used in accordance with NICE guidance. ECT is not recommended for children (5–11 years).

9.8.7.1 ECT should only be considered for young people with very severe depression and either life-threatening symptoms (such as suicidal behaviour) or intractable and severe symptoms that have not responded to other treatments. (C)

9.8.7.2 ECT should be used extremely rarely in young people and only after careful assessment by a practitioner experienced in its use and only in a specialist environment in accordance with NICE recommendations. (C)

9.8.7.3 ECT is not recommended in the treatment of depression in children (5–11 years). (C)

9.8.8 Discharge after a first episode

After full remission, children and young people who have been depressed should be followed up for a year. After discharge, those re-referred should be seen quickly and should not be placed on a routine waiting list.

9.8.8.1 When a child or young person is in remission (less than two symptoms and full functioning for at least 8 weeks) they should be reviewed regularly for 12 months by an experienced CAMHS professional. The exact frequency of contact should be agreed between the CAMHS professional and the child or young person and/or the parent(s) or carer(s) and recorded in the notes. At the end of this period, if remission is maintained, the young person can be discharged to primary care. (C)

9.8.8.2 CAMHS should keep primary care professionals up to date about progress and the need for monitoring of the child or young person in primary care. CAMHS should also inform relevant primary care professionals within 2 weeks of a patient being discharged and should provide advice about who to contact in the event of a recurrence of depressive symptoms. (GPP)

9.8.8.3 Children and young people who have been successfully treated and discharged but then re-referred should be seen as soon as possible rather than placed on a routine waiting list. (GPP)

9.8.9 Recurrent depression and relapse prevention

Those at high risk of relapse, including those with recurrent depression, may benefit from an extended period of psychological therapy and practical help to self-monitor symptoms of relapse. They should be followed up for at least 2 years after remission, and should be seen urgently if they are re-referred.

9.8.9.1 Specific follow-up psychological therapy sessions to reduce the likelihood of, or at least detect, a recurrence of depression should be considered for children and young people who are at a high risk of relapse (for example individuals who have already experienced two prior episodes, those who have high levels of subsyndromal symptoms, or those who remain exposed to multiple-risk circumstances). (B)

9.8.9.2 CAMHS specialists should teach recognition of illness features, early warning signs, and subthreshold disorders to tier 1 professionals, children or young people with recurrent depression and their families and carer(s). Self-management techniques may help individuals to avoid and/or cope with trigger factors. (GPP)

9.8.9.3 When a child or young person with recurrent depression is in remission (less than two symptoms and full functioning for at least 8 weeks) they should be reviewed regularly for 24 months by an experienced CAMHS professional. The exact frequency of contact should be agreed between the CAMHS professional and the child or young person and/or the parent(s) or carer(s) and recorded in the notes. At the end of this period, if remission is maintained, the young person can be discharged to primary care. (C)

9.8.9.4 Children and young people with recurrent depression who have been successfully treated and discharged but then re-referred should be seen as a matter of urgency. (GPP)

9.9 Transfer to adult services

When a young person becomes 18 years of age while receiving treatment and care from CAMHS, CAMHS should continue to provide care in accordance with this guideline. CAMHS and adult services should work cooperatively using the Care Programme Approach to ensure smooth transfer to adult services for those with recurrent depression, prepare young people for transfer, and provide good information about treatment for adults, and about local services.

9.9.1.1 The CAMHS team currently providing treatment and care for a young person aged 17 who is recovering from a first episode of depression should normally continue to provide treatment until discharge is considered appropriate in accordance with this guideline, even when the person turns 18 years of age. (GPP)

9.9.1.2 The CAMHS team currently providing treatment and care for a young person aged 17–18 who either has ongoing symptoms from a first episode that are not resolving or has, or is recovering from, a second or subsequent episode of depression should normally arrange for a transfer to adult services, informed by the Care Programme Approach. (GPP)

9.9.1.3 A young person aged 17–18 with a history of recurrent depression who is being considered for discharge from CAMHS should be provided with comprehensive information about the treatment of depression in adults (including the NICE 'Information for the Public' version for adult depression) and information about local services and support groups suitable for young adults with depression. (GPP)

9.9.1.4 A young person aged 17–18 who has successfully recovered from a first episode of depression and is discharged from CAMHS should not normally be referred on to adult services, unless they are considered to be at high risk of relapse (for example, if they are living in multiple-risk circumstances). (GPP)

9.10 Research recommendations

The Guideline Development Group has made the following recommendations for research, on the basis of its review of the evidence. The Group regards these recommendations as the most important research areas to improve NICE guidance and patient care in the future.

9.10.1 Phase one

An appropriately blinded, randomised controlled trial should be conducted to assess the efficacy (including measures of family and social functioning as well as depression) and the cost effectiveness of individual CBT, systemic family therapy and child psychodynamic psychotherapy compared with each other and treatment as usual in a broadly based sample of children and young people diagnosed with moderate to severe depression (using minimal exclusion criteria). The trial should be powered to examine the effect of treatment in children and young people separately and involve a follow-up of 12 to 18 months (but no less than 6 months).

9.10.2 Phase two

An appropriately blinded, randomised controlled trial should be conducted to assess the efficacy (including measures of family and social functioning as well as depression) and the cost effectiveness of fluoxetine, the favoured psychological therapy (from phase one), the combination of fluoxetine and psychological therapy compared with each other and placebo in a broadly based sample of children and young people diagnosed with moderate to severe depression (using minimal exclusion criteria). The trial should be powered to examine the effect of treatment in children and young people separately and involve a follow up of 12 to 18 months (but no less than 6 months). In order for this trial to be conducted, the previous trial (phase 1) needs to be completed.

9.10.3 Additional research

9.10.3.1 An appropriately blinded, randomised controlled trial should be conducted to assess the efficacy (including measures of family and social functioning as well as depression) and the cost effectiveness of another self-help intervention compared with computerised CBT and treatment as usual in a sample of children and young people treated in primary care who have been diagnosed with depression. The trial should be powered to examine the effect of treatment in children and young people separately and involve a follow-up of 12 to 18 months (but no less than 6 months).

9.10.3.2 A qualitative study should be conducted that examines the experiences in the care pathway of children and young people and their families (and perhaps professionals) in order to inform decisions about what the most appropriate care pathway should be.

9.10.3.3 An appropriately designed study should be conducted to compare validated screening instruments for the detection of depression in children and young people. An emphasis should be placed on examining those that use computer technology and more child-friendly methods of assessing current mood and feelings, and take into account cultural and ethnic variations in communication, family values and the place of the child or young person within the family.

9.11 Audit criteria

Measures that could be used as a basis for an audit (see Table 21).

Table 21: Audit criteria

Standards	Criteria	Audit methods
Assessment and coordination of care		
When assessing a child or young person with depression, healthcare professionals should routinely consider, and record in the patient's notes, potential comorbidities, and the social, educational and family context for the patient and family members, including the quality of interpersonal relationships, both between the patient and other family members, and with their friends and peers	Clinical notes include information concerning: ● life events ● associated psychological factors ● comorbid conditions ● family context ● school context ● social context ● family relationships ● peer relationships	Case note audit of a random selection of children and young people with depression Review of service protocols for the management of depression
Treatment considerations in all settings		
Psychological therapies used in the treatment of children and young people should be provided by therapists who are also trained child and adolescent mental healthcare professionals	Services should agree minimum training criteria for healthcare professionals engaging in psychological therapy Healthcare professionals delivering psychological therapies should meet agreed minimum criteria	Review of service policies Survey of healthcare professional qualifications and CPD experience
Comorbid diagnoses and developmental, social and educational problems should be assessed and managed, either in sequence or in parallel, with the treatment for depression. Where appropriate this should be done through consultation and alliance with a wider network of education and social care	Clinical notes include information concerning: ● comorbid conditions ● social difficulties ● educational problems Where problems in these areas are identified in case notes, evidence should exist that discussion has taken place about intervention for identified problems	Case note audit of a random selection of children and young people with depression Review of service protocols for the management of depression

Continued

Standards	Criteria	Audit methods
Attention should be paid to the possible need for parents' own psychiatric problems (particularly depression) to be treated in parallel, if the child or young person's mental health is to improve. If such a need is identified, then a plan for obtaining such treatment should be made, bearing in mind the availability of adult mental health provision and other services	Clinical notes should record information concerning the assessment of parental mental health Where clinical notes indicate that parental mental health is of concern there should be a record of a discussion about referral to appropriate treatment services	Case note audit of a random selection of children and young people with depression
Step 1 Detection and risk profiling Healthcare professionals in primary care, schools and other relevant community settings should be trained to detect symptoms of depression, and to assess children and young people who may be at risk of depression. Training should include the evaluation of recent and past psychosocial risk factors, such as age, gender, family discord, bullying, physical, sexual or emotional abuse, comorbid disorders, including drug and alcohol use, and a history of parental depression; the natural history of single loss events; the importance of multiple risk factors; ethnic and cultural factors; and factors known to be associated with a high risk of depression and other health problems, such as homelessness, refugee status and living in institutional settings	Services should have training programmes for tier 1 professionals that address: ● detection of depressive symptoms ● assessment of risk factors for depression ● culturally sensitive systems for detecting and supporting children and young people with depression	Review of service polices Review of service training records Survey of tier 1 professionals' perceptions of ● availability of training ● quality of training

Continued

Standards	Criteria	Audit methods
CAMHS tier 2 or 3 should work with health and social care professionals in primary care, schools and other relevant community settings to provide training and develop ethnically and culturally sensitive systems for detecting, assessing, supporting and referring children and young people who are either depressed or at significant risk of becoming depressed	See above	See above
Step 2 Recognition Training opportunities should be made available to improve the accuracy of CAMHS professionals in diagnosing depressive conditions. The existing interviewer-based instruments (such as Kiddie-Sads [K-SADS] and Child and Adolescent Psychiatric Assessment [CAPA]) could be used for this purpose but will require modification for regular use in busy routine CAMHS settings	Services should have training programmes for CAMHS professionals across all tiers that address the detection and diagnosis of depression in children and young people	Review of service polices Review of service training records Survey of CAMHS professionals' perceptions of: ● availability of training ● quality of training Review of teaching methods used
Step 3 Mild depression Antidepressant medication should not be used for the initial treatment of children and young people with mild depression	Children and young people presenting with mild depression should not be prescribed antidepressant medication as a first-line intervention	Children and young people prescribed antidepressants in primary care, child health or CAMHS could be identified using pharmacy records. Those identified could be surveyed to establish that other psychological therapies had been offered before the antidepressant was prescribed

Continued

Standards	Criteria	Audit methods
Steps 4 and 5 Moderate or severe depression		
Children and young people with moderate to severe depression should be offered, as a first-line treatment, a specific psychological therapy (individual CBT, interpersonal therapy or shorter-term family therapy; it is suggested that this should be for at least 3 months' duration)	Psychological therapies should be offered before medication Psychological therapies should be: ● time limited ● structured ● cognitive behavioural therapy, family therapy or interpersonal therapy	Review of service protocols for treatment of depression Review of service protocols for delivering psychological therapies Structured review of case notes of a random representative sample of children and young people with depression
Antidepressant medication should not be offered to a child or young person with moderate to severe depression except in combination with a concurrent psychological therapy. Specific arrangements must be made for careful monitoring of adverse drug reactions, as well as for reviewing mental state and general progress; for example, weekly contact with the child or young person and their parent(s) or carer(s) for the first 4 weeks of treatment. The precise frequency will need to be decided on an individual basis, and recorded in the notes. In the event that psychological therapies are declined, medication may still be given, but as the young person will not be reviewed at psychological therapy sessions, the prescribing doctor should closely monitor the child or young person's progress on a regular basis and focus particularly on emergent adverse drug reactions	Children or young people on antidepressant medication should have been offered psychological therapy Where children and young people have been offered medication, systems must be in place for regular monitoring of side effects. Where children and young people are not receiving psychological therapy, regular meetings must be held (at least monthly in the first 3 months of treatment) to monitor side effects Children and young people and their parent(s) or carer(s) must have been informed of the risks as well as benefits of antidepressant medication	Structured review of case notes of a random representative sample of children and young people with depression Survey of patients and families/carers to establish whether information about risks and side effects has been provided

10 Appendices

Appendix A: Scope for the development of a clinical guideline on the identification and management of depression in children and young people

1 Final version

29th September 2003

2 Guideline title

Depression in children: identification and management of depression in children and young people in primary, community and secondary care.[1]

2.1 Short title

Depression in children.

3 Background

a) The National Institute for Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Mental Health to develop a clinical guideline on the management of depression in children and young people in primary, community and secondary care for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health and Welsh Assembly Government (see Appendix [to the scope]). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.

b) The Institute's clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals published by the Institute after an NSF has been issued will have the effect of updating the Framework.

[1]The title changed in the development process to: 'Depression in children and young people: identification and management in primary, community and secondary care'.

4 Clinical need for the guideline

a) It has been estimated that 1 in 33 children and 1 in 8 adolescents are suffering from depression at any one time. Depression in young people often occurs with other mental disorders, and recognition and diagnosis of the disorder may be more difficult in children because the way symptoms are expressed varies with the developmental age of the individual. In addition to this, stigma associated with mental illness may obscure diagnosis. The prevalence figures exceed the numbers receiving treatment. Suicide is the third leading cause of death for 15–24-year-olds and the sixth leading cause of death for 5–14-year-olds.

b) Children who experience a loss (for example separation of parents or bereavement) high levels of stress (for example family problems, abuse, examination pressure, bullying, socioeconomic factors or serious illness) learning disorders, or conduct disorders are at higher risk for depression. Children who develop depression are more likely to have a family history of the disorder in childhood. Younger boys and girls appear to be at equal risk for depression, but during adolescence, girls are twice as likely to develop depression.

c) Treatment for depressive disorders in children and adolescents can involve a range of treatments including antidepressant medication, short-term psychotherapy, counselling, creative therapies or a combination of these treatments. In the UK, antidepressant medication is used far less frequently than in the USA. Antidepressants, when used, are not always prescribed in the appropriate doses. There is a well-recognised lack of evidence from randomised controlled trials, on the use of medication in children and adolescents. Targeted interventions involving the home or school environment are sometimes used. Hospitalisation may be required if a child or young person has a plan to commit suicide and access to the means to do this (serious suicidal ideation), the patient is dangerous to themselves or others, there is a complicating medical condition or there is lack of support systems at home. Using antidepressant medication to treat children and adolescents and the perceived stigma attached to labelling a child as suffering from a mental illness have caused controversy.

d) A number of guidelines, consensus statements and local protocols exist. This guideline will review evidence of clinically and cost effective practice, together with current guidelines, and will offer guidance on best practice.

5 The guideline

a) The guideline development process is described in detail in three booklets that are available from the NICE website (see 'Further information'). *The Guideline Development Process – Information for Stakeholders* describes how organisations can become involved in the development of a guideline.

b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health and Welsh Assembly Government (see Appendix [to the scope]).

c) The areas that will be addressed by the guideline are described in the following sections.

5.1 Population

5.1.1 Groups that will be covered

The recommendations made in the guideline will cover management of the following groups:

a) Children and young people 5 years of age and up to 18 years of age who meet the standard diagnostic criteria of depression or related disorders, including psychotic depression and dysthymia (a mild form of depression). The standard diagnostic criteria of depression will be defined in the guideline.

b) Children and young people with mild, moderate or severe depression (primary, chronic or recurring).

5.1.2 Groups that will not be covered

a) Children 4 years of age and under and adults 19 years of age and over.

b) Bipolar disorder.

c) Although the guideline will be of relevance to all children and young people with depression whether or not it is accompanied by other conditions and illnesses, it will not specifically or separately make recommendations on:

- how learning disabilities and challenging behaviour moderate the effect of various interventions.
- the specific management of patients with other physical or psychiatric conditions (comorbidities).

5.2 Healthcare setting

a) The guideline will cover the care provided by primary, community and secondary healthcare professionals who have direct contact with and make decisions concerning the care of children and young people with depression.

b) This is an NHS guideline. Although it will comment on the interface with other services such as those provided by social services, educational services, the voluntary sector and young offender institutions, it will not include recommendations relating to the services exclusively provided by these agencies.

c) The guideline will include:

- care in general practice and NHS community care
- hospital outpatient and inpatient care
- primary/secondary interface of care
- transition from childhood services to adult services.

5.3 Clinical management – areas that will be covered

The guideline will cover the following areas of clinical practice:

a) The full range of care routinely made available by the NHS.

b) Diagnostic criteria currently in use will be clarified and confirmed and therefore will describe the diagnostic factors that trigger the use of this guideline. The definition of the condition in relation to other affective disorders (mood disorders) will be precise.

c) Early identification of depression in children in primary care and identification of aspects of care which might trigger further investigation into the possibility of depression.

d) Pathways to treatment.

e) Relapse prevention, risk management, suicide prevention and action that might be taken when patients appear not to respond to treatment, including criteria for referral on to other specialist services.

f) Appropriate use of pharmacological treatments, including:

- Type; for example, tricyclic antidepressants, selective serotonin re-uptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), other antidepressants including flupentixol, and Hypericum (St John's Wort)

- Dose, duration, discontinuation, side effects, toxicity, and non-response to medication – improving concordance, changing drug regimens and sequencing.

When referring to pharmacological treatments, the guideline will wherever possible recommend within the licensed indications. However, where the evidence clearly supports it, recommendations for use outside the licensed indications may be made in exceptional circumstances.

g) Psychological interventions, for example, family interventions, counselling, cognitive behavioural therapy, psychotherapy and referral to other therapies.

h) Self-care, for example, information to enable informed choices, exercise, self-help groups, educational interventions, and peer group support.

i) Sensitivity to different beliefs and attitudes of different races and cultures, issues of social exclusion and experiences of refugees, in relation to child mental health.

j) The role of the family in the treatment and support of patients, with consideration of parental choice, consent and help that may be needed by carers.

5.4 Clinical management – areas that will not be covered

The guideline will not cover the following areas of clinical practice:

a) Treatments that are not normally available on the NHS.

b) Primary prevention of depression, although relapse prevention will be addressed.

5.5 Audit support within the guideline

The guideline will include review criteria for audit of the key recommendations, which will enable objective measurements to be made of the extent and nature of local implementation of this guidance, particularly its impact upon practice and outcomes for patients.

5.6 Status

5.6.1 Scope

This is the scope, which has been through a 4-week period of consultation with stakeholders and reviewed by the Guidelines Review Panel and the Institute's Guidance Executive.

5.6.2 Guideline

The development of the guideline recommendations will begin in the late Spring of 2003.

6 Further information

Information on the guideline development process is provided in:

- *The Guideline Development Process – Information for the Public and the NHS*
- *The Guideline Development Process – Information for Stakeholders*
- *The Guideline Development Process – Information for National Collaborating Centres and Guideline Development Groups.*

These booklets are available as PDF files from the NICE website (www.nice.org.uk). Information on the progress of the guideline will also be available from the website.

Referral from the Department of Health and Welsh Assembly Government

The Department of Health and Welsh Assembly Government asked the Institute:
'To prepare clinical guidelines for the NHS in England and Wales on depression in children. The guideline should clearly set out the current state of knowledge of effectiveness of interventions – both what works and what does not work. The guideline should address identification; management in primary care of the milder forms of depression and the management of moderate to severe presentations within specialist services. Due account to be taken of comorbidity with other disorders and the practicalities of translating evidence of efficacy into day to day clinical practice.'

Appendix B: Stakeholders who responded to early requests for evidence

British Association for Behavioural and Cognitive Psychotherapies

British Association for Counselling and Psychotherapy

Chartered Society of Physiotherapy

College of Occupational Therapists

Counselling in Primary Care Trust

Critical Psychiatry Network

GlaxoSmithKline UK Limited

Haringey Adolescent Outreach Team; Barnet, Enfield and Haringey NHS Trust

Human Givens Institute

Inner Cities Mental Health Group

L'Arche UK

Merck Sharp & Dohme

Neonatal and Paediatric Pharmacists Group

NHS Quality Improvement Scotland

Pfizer Limited

Professor David Lane

The Royal College of General Practioners

The Royal College of Nursing

The Royal College of Psychiatrists

The Royal College of Speech and Language Therapists

Social Care Institute for Excellence

Appendix C: Stakeholders and experts who responded to the first consultation draft of the guideline

Stakeholders

Association of the British Pharmaceuticals Industry (ABPI)

British Association for Counselling and Psychotherapy

British Association for Psychopharmacology

British Association of Art Therapists

The British Psychological Society

Cornwall Partnership Trust

Critical Psychiatry Network

Department of Health

Derbyshire Mental Health Services NHS Trust

Health Development Agency

Leeds Teaching Hospital NHS Trust

Lundbeck Ltd

Mental Health Act Commission

National Society for the Prevention of Cruelty to Children

NCH The Children's Charity

North Staffordshire Combined Healthcare NHS Trust

Oxfordshire MH Care NHS Trust

Papyrus (Prevention of Suicides)

Patient Involvement Unit for NICE (now the Patient and Public Involvement Programme)

Pfizer Ltd

Rethink Severe Mental Illness

Royal College of General Practitioners

Royal College of Nursing

Royal College of Paediatrics and Child Health

Royal College of Psychiatrists

Royal Liverpool Children's NHS Trust

Sheffield Children's Hospital NHS Trust

Tavistock and Portman NHS Trust

TOAST (The Obesity Awareness and Solutions Trust)

UK Council for Psychotherapy

Welsh Assembly Government

Experts

Professor Clair Chilvers

A.P. Cull

Dr Michael Galbraith

Dr Ken Harper

Dr Ursula Doerry & Dr Sian Hughes

Dr Brian W. Jacobs

Dr Tony Kendrick

Ms Carol Paton

Professor Maria Rhode

Dr Judith Trowell

Mr Stephen Walker

Appendix D: Researchers/companies contacted to request information about unpublished or soon-to-be published studies

Professor Carol Fitzpatrick

Professor John March

Dr James Leckman

Chris Sutton (H. Lundbeck A/S)

Appendix E: Clinical questions

1 Screening/detection/risk/early identification

- What risk factors are associated with depression in children and young people?
- Do screening instruments for depression have an influence on detection of depression in children and young people?
- How might services be organised to detect depression in children and young people?

2 Pharmacological interventions

- For children and young people who are depressed*, does any antidepressant[ϕ] when compared with placebo/comparator drug, produce benefits/harms on the specified outcomes?
- For children and young people who are depressed*, does any drug treatment (other than antidepressants) when compared with placebo/comparator drug, produce benefits/harms on the specified outcomes?
- For children and young people who are depressed*, does any antidepressant when compared with any psychological intervention produce benefits/harms on the specified outcomes?
- For children and young people who are depressed*, does the combination of an antidepressant and a psychological intervention when compared with an antidepressant alone/psychological intervention alone produce benefits/harms on the specified outcomes?

3 Psychological interventions

- For children and young people who are depressed*, does a psychological intervention[†] when compared with 'standard care'/waitlist control/protocol driven clinical management/another psychological intervention produce benefits/harms on the specified outcomes?
- For a psychological intervention that works, are [outcomes] correlated with any characteristics of the therapist/service user?

4 Self-help, family support, inpatient & other treatments

- For children and young people who are undiagnosed but at high risk of depression, does self-help or other psychological interventions when compared with 'standard care' alone, produce benefits/harms on the specified outcomes?

---

*Sub-analyses will be done where possible by severity of depression (mild to moderate, and severe), service user characteristics (for example, age: 5–10, and 11–17 years old), comorbidity (such as, substance abuse, anxiety, physical symptoms, behavioural disorders), other factors (for example, school refusal, depressed parent, ethnicity), and treatment response/resistance (such as, severely and/or chronically depressed children who have not responded to an adequate trial of an antidepressant).

[†]Sub-analyses will be done where possible by class of antidepressant (such as, tricyclic and related antidepressants, SSRIs, MAOIs, other antidepressants) and treatment characteristics (for example, frequency and length of treatment).

- For children and young people who are undiagnosed but at high risk of depression, does family support/parental education when compared with 'standard care', produce benefits/harms on the specified outcomes?
- For children and young people who are depressed, does self-help when compared with 'standard care', produce benefits/harms on the specified outcomes?
- For children and young people who are depressed, does family support/parental education when compared with 'standard care', produce benefits/harms on the specified outcomes?
- For children and young people who are depressed, is there any subgroup for which inpatient treatment produces benefits on the specified outcomes?
- For children and young people who are depressed, is there any subgroup in which social/environmental treatments alone produce benefits on the specified outcomes? (for example, in young people who are experiencing bullying or abuse)?

5 Relapse prevention

- For children and young people who are depressed, do antidepressant drugs, when compared with 'standard care', prevent relapse in the long term when prescribed in the recommended maintenance dose range?
- For children and young people who are depressed, how long should antidepressant drug treatment be continued for prevention of relapse?
- For children and young people who are depressed, do psychological interventions, when compared with 'standard care', prevent relapse in the long term?

Appendix F: Search strategies for the identification of clinical studies

1 General search filters (MEDLINE, EMBASE, PsycINFO, CINAHL – OVID interface)

1.1 General Filter 1: Depression in children and young people

1. (depression or depressive disorder or dysthymic disorder or seasonal affective disorder or depression, reactive).sh.
2. (major depression or anaclitic depression or dysthymic disorder or endogenous depression or reactive depression or recurrent depression or treatment resistant depression).sh.
3. (depression or dysthymia or endogenous depression).sh.
4. or/1-3
5. exp child/or exp adolescent/
6. exp pediatrics/
7. (child$ or adolescen$).tw.
8. or/5-7
9. 4 and 8
10. limit 9 to (adult <19 to 44 years> or aged <65 to 79 years> or "aged <80 and over>" or middle age <45 to 64 years>)
11. limit 10 to (all adult <19 plus years> or "all aged <65 and over>")
12. limit 11 to adulthood <18+ years>
13. limit 12 to (adult <18 to 64 years> or aged <65+ years>)
14. 9 not 13

1.2 General Filter 2: Depression in children and young people

1. (depression or depressive disorder or dysthymic disorder or seasonal affective disorder or depression, reactive).sh.
2. (major depression or anaclitic depression or dysthymic disorder or endogenous depression or reactive depression or recurrent depression or treatment resistant depression).sh.
3. (depression or dysthymia or endogenous depression).sh.
4. or/1-3
5. exp child/or exp adolescent/
6. exp pediatrics/
7. (child$ or adolescen$).tw.
8. or/5-7
9. 4 and 8
10. limit 9 to (adult <19 to 44 years> or aged <65 to 79 years> or "aged <80 and over>" or middle age <45 to 64 years>)
11. limit 10 to (all adult <19 plus years> or "all aged <65 and over>")
12. limit 11 to adulthood <18+ years>
13. limit 12 to (adult <18 to 64 years> or aged <65+ years>)
14. 9 not 13
15. 10 not 14

2 RCT filter

1. exp clinical trials/or cross-over studies/or random allocation/or double-blind method/or single-blind method/
2. random$.pt.
3. exp clinical trial/or crossover procedure/or double blind procedure/or single blind procedure/or randomization/
4. exp clinical trials/or crossover design/or random assignment/
5. exp clinical trials/or double blind method/or random allocation/
6. random$.mp.
7. (cross-over or cross?over or (clinical adj2 trial$) or single-blind$ or single?blind$ or double-blind or double?blind$ or triple-blind or triple?blind).tw.
8. or/1-7
9. animals/not (animals/and human$.mp.)
10. animal$/not (animal$/and human$/)
11. meta-analysis/
12. meta-analysis.pt.
13. systematic review/
14. or/9-13
15. 8 not 14

3 Question specific search filters

Date: 15 July 2003	Database: EMBASE, MEDLINE, PsycINFO		
Question: What risk factors are associated with depression in children and young people?			
Search strategy: See below			
Limits: none	Years: All	Hits: 3390	Dedup'ed: 2802
Filter: RCT		Hits with Filter:	

1-14 [General filter 1 for depression in children and young people]
15. risk.ti. or risk.mp.
16. risk factor.sh.
17. risk factors.sh.
18. high risk population.sh.
19. at risk populations.sh.
20. risk factor$.ti,ab.
21. or/15-20
22. 14 and 21
23. remove duplicates from 22

Date: 26 Feb 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: Do screening instruments for depression have an influence on detection of depression in children and young people? How might services be organised to detect depression in children and young people?			
Search strategy: See below			
Limits: none	Years: All	Hits: 2512	Dedup'ed: 2287
Filter: RCT		Hits with Filter:	

1-14 [General filter 1 for depression in children and young people]
15. mass screening.sh. or exp psychiatric status rating scales/
16. screening.sh. or exp screening tests/or rating scales.sh. or exp attitude measures/or psychometrics.sh. or attitude measurement.sh.
17. (mass screening or screening test or evaluation).sh.
18. (childhood depression inventory or KOVACS or Beck Depression Inventory or CBCL or Child Behaviour Checklist or Child Behavior Checklist).ti,ab.
19. diagnosis.sh. and depression.ti,ab.
20. (early adj2 (detection or identification or recogni$ or assessment)).ti,ab.
21. or/15-20
22. 14 and 21
23. remove duplicates from 22

Date: 26 February 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: For a psychological intervention that works, are [outcomes] correlated with any characteristics of the therapist/service user?			
Search strategy: See below			
Limits: none	Years: All	Hits: 838	Dedup'ed: 789
Filter: RCT		Hits with Filter:	

1-15 [General filter 2 for depression in children and young people]
16. (recruited or recruitment or advertised or advertisement or referred or referral).mp.
17. ((diagnosable or diagnosed) adj1 depression).mp.
18. (motivation adj1 (therapist or clinician or counsellor or patient)).mp.
19. (male or female).ti,ab.
20. (race or ethnicity).mp.
21. exp socioeconomic factors/
22. exp socioeconomic status/
23. exp socioeconomics/
24. socioeconomic$.ti,ab.
25. ((therapist or clinician or counsellor) adj (training or experience)).mp.
26. or/16-25
27. 15 and 26
28. exp psychotherapy/
29. (interpersonal therap$ or psychotherap$ or cognitive therap$ or cognitive behaviour or cognitive behaviour or counsel$ or problem solving).tw.
30. or/28-29
31. 27 and 30
32. remove duplicates from 31

Date: 26 February 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: For children and young people who are undiagnosed but at high risk of depression, does self-help or other psychological interventions when compared to 'standard care' alone, produce benefits/harms on the specified outcomes?			
Search strategy: See below			
Limits: none	Years: All	Hits: 1124	Dedup'ed: 993
Filter: RCT		Hits with Filter:	

1-15 [General filter 2 for depression in children and young people]
16. (self help groups or bibliotherapy or exercise).sh.
17. exp exercise/or support groups.sh. or bibliotherapy.sh.
18. bibliotherapy.sh. or exp exercise/or exp self help techniques/
19. self help.sh. or exp exercise/
20. (self help or exercise or bibliotherapy or book therapy).ti,ab.
21. (audio?tape$ or video?tape$ or computer$ or multimedia$).mp.
22. or/16-21
23. 15 and 22
24. remove duplicates from 23

Date: 26 February 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: For children and young people who are undiagnosed but at high risk of depression, does family support/parental education when compared with 'standard care', produce benefits/harms on the specified outcomes? For children and young people who are depressed, does family support/parental education when compared with 'standard care', produce benefits/harms on the specified outcomes?			
Search strategy: See below			
Limits: none	Years: All	Hits: 1098	Dedup'ed: 1002
Filter: RCT		Hits with Filter:	

1-15 [General filter 2 for depression in children and young people]
16. family therapy.sh.
17. ((famil$ or parent$) adj1 (educat$ or program$ or therap$)).ti,ab.
18. (parent$ adj (training or advice or support)).ti,ab.
19. or/16-18
20. 15 and 19
21. remove duplicates from 20

Date: 26 February 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: For children and young people who are depressed, is there any subgroup for which inpatient treatment produces benefits on the specified outcomes?			
Search strategy: See below			
Limits: none	Years: All	Hits: 1545	Dedup'ed: 1519
Filter: RCT		Hits with Filter:	

1-15 [General filter 2 for depression in children and young people]
16. (inpatients or adolescent health services or day care).sh.
17. (hospitalization or partial hospitalization).sh.
18. (hospital patient or day care or child health care or day hospital or hospitalization).sh.
19. (hospital or day care or adolescent unit or acute care or day hospital$ or partial hospital$ or inpatient$).tw.
20. or/16-19
21. 15 and 20

22. remove duplicates from 21
23. *hospitals, psychiatric/
24. *psychiatric hospitalization/or *psychiatric hospitals/
25. *mental hospital/
26. or/23-25
27. 26 and 9
28. limit 27 to (adult <19 to 44 years> or aged <65 to 79 years> or "aged <80 and over>" or middle age <45 to 64 years>)
29. limit 28 to (all adult <19 plus years> or "all aged <65 and over>")
30. limit 29 to adulthood <18+ years>
31. limit 30 to (adult <18 to 64 years> or aged <65+ years>)
32. 27 not 31
33. remove duplicates from 32
34. 33 not 22

Date: 26 February 2004	Database: EMBASE, MEDLINE, PsycINFO, CINAHL		
Question: For children and young people who are depressed, is there any subgroup in which social/environmental treatments alone produce benefits on the specified outcomes? (for example, in young people who are experiencing bullying or abuse)			
Search strategy: See below			
Limits: none	Years: All	Hits: 621	Dedup'ed: 557
Filter: RCT		Hits with Filter:	

1. (depression or depressive disorder or dysthymic disorder or seasonal affective disorder or depression, reactive).sh.
2. (major depression or anaclitic depression or dysthymic disorder or endogenous depression or reactive depression or recurrent depression or treatment resistant depression).sh.
3. (depression or dysthymia or endogenous depression).sh.
4. (depress$ or dysthym$ or seasonal affective).tw.
5. self concept/or self esteem/
6. or/1-5
7. exp child welfare/
8. exp child abuse/or exp sexual abuse/
9. (bully$ or victimization).mp.
10. (abuse adj1 (child or sex$)).ti,ab.
11. or/7-10
12. social environment/
13. (removal or placement or intervention).mp.
14. or/12-13
15. 6 and 11 and 14
16. remove duplicates from 15

Date: 18 February 2004	Database: EMBASE, CINAHL, MEDLINE, PsycINFO		
Question: For children and young people who are depressed, do antidepressant drugs, when compared with 'standard care', prevent relapse in the long term when prescribed in the recommended maintenance dose range? For children and young people who are depressed, how long should antidepressant drug treatment be continued for prevention of relapse? For children and young people who are depressed, do psychological interventions, when compared with 'standard care', prevent relapse in the long term?			
Search strategy: See below			
Limits: none	Years: all	Hits: 361	Dedup'ed: 328
Filter: n/a		Hits with Filter:	

1-15 [General filter 2 for depression in children and young people]
16. recurrence.sh.
17. relapse.sh.
18. relapse prevention.sh.
19. ((relapse or recurr$) and prevent$).mp.
20. or/16-19
21. 15 and 20
22. remove duplicates from 21

Appendix G: Systematic review quality checklist

Table 22: Quality checklist for a systematic review (notes for reviewer are presented in italics)

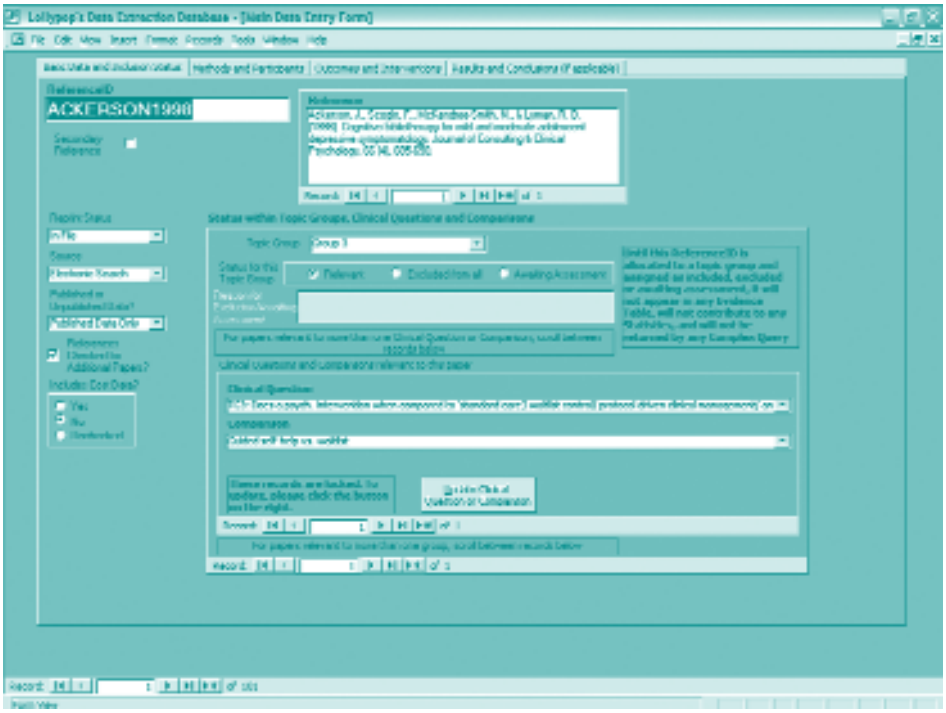
Checklist completed by:		Report reference ID:	
SECTION 1: VALIDITY			
Evaluation criteria		**Comments**	
1.1	Does the review address an appropriate and clearly focused question?	*Unless a clear and well-defined question is specified, it will be difficult to assess how well the study has met its objectives or how relevant it is to the question you are trying to answer on the basis of its conclusions.*	
1.2	Does the review include a description of the methodology used?	*A systematic review should include a detailed description of the methods used to identify and evaluate individual studies. If this description is not present, it is not possible to make a thorough evaluation of the quality of the review, and it should be rejected as a source of Level 1 evidence. (Though it may be useable as Level 4 evidence, if no better evidence can be found.)*	
1.3	Was the literature search sufficiently rigorous to identify all relevant studies?	*Consider whether the review used an electronic search of at least one bibliographic database (searching for studies dating at least 10 years before publication of the review). Any indication that hand searching of key journals, or follow-up of reference lists of included studies were carried out in addition to electronic database searches can normally be taken as evidence of a well-conducted review.*	
1.4	Was study quality assessed and taken into account?	*A well-conducted systematic review should have used clear criteria to assess whether individual studies had been well conducted before deciding whether to include or exclude them. At a minimum, the authors should have checked that there was adequate concealment of allocation, that the rate of drop out was minimised, and that the results were analysed on an 'intention to treat' basis. If there is no indication of such an assessment, the review should be rejected as a source of Level 1 evidence. If details of the assessment are poor, or the methods considered to be inadequate, the quality of the review should be downgraded.*	
SECTION 2: OVERALL ASSESSMENT			
		Comments	**Code**
2.1	Low risk of bias Moderate risk of bias High risk of bias	*All or most criteria met* *Most criteria partly met* *Few or no criteria met*	**A** **B** **C**

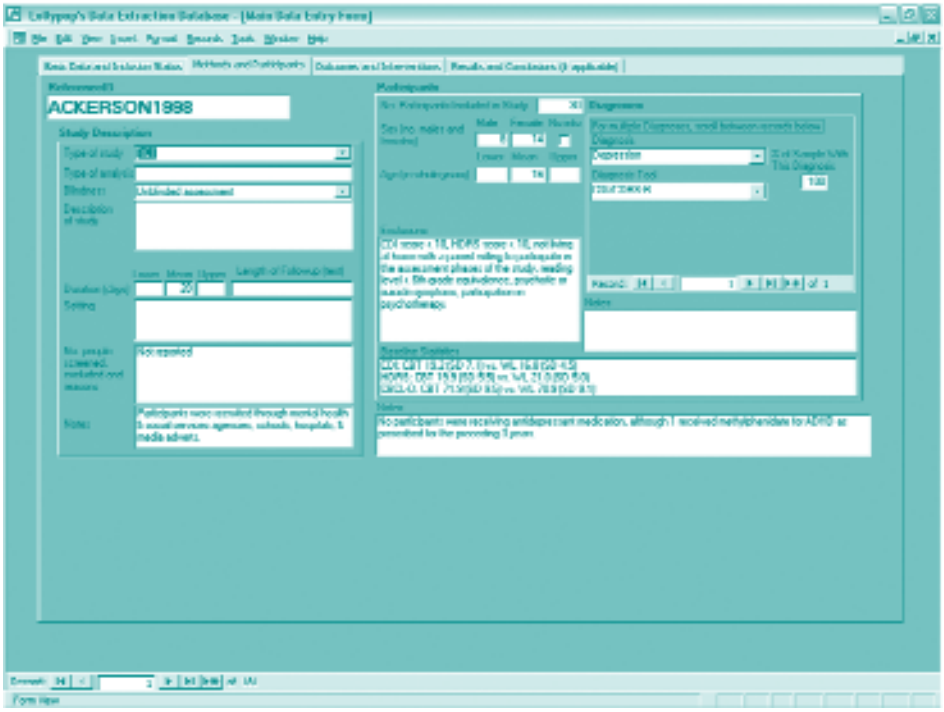
Appendix H: RCT methodological quality checklist

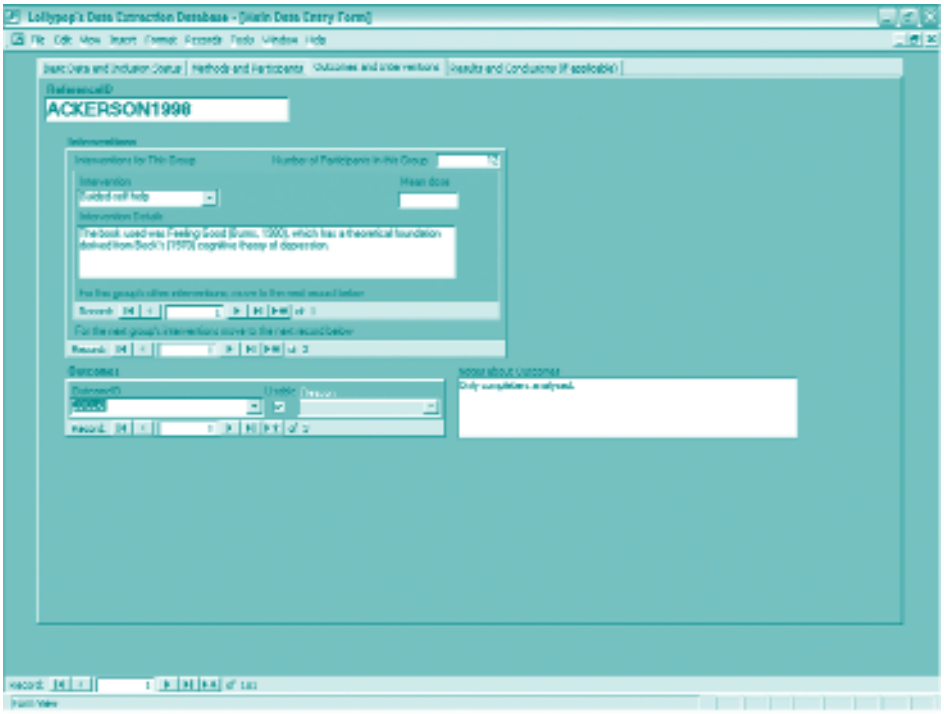
Table 23: Quality checklist for a randomised controlled trial (notes for reviewer are presented in italics)

Checklist completed by:		Report reference ID:	
SECTION 1: INTERNAL VALIDITY			
Evaluation criteria		**Comments**	
1.1	Was the assignment of subjects to treatment groups randomised?	***If there is no indication of randomisation, the study should be rejected.*** *If the description of randomisation is poor, or the process used is not truly random (for example, allocation by date, alternating between one group and another) or can otherwise be seen as flawed, the study should be given a lower quality rating.*	
1.2	Was an adequate concealment method used?	*Centralised allocation, computerised allocation systems, or the use of coded identical containers would all be regarded as adequate methods of concealment, and may be taken as indicators of a well-conducted study. If the method of concealment used is regarded as poor, or relatively easy to subvert, the study must be given a lower quality rating, and can be rejected if the concealment method is seen as inadequate.*	
SECTION 2: OVERALL ASSESSMENT			
		Comments	**Code**
2.1	Low risk of bias Moderate risk of bias High risk of bias	*Both criteria met* *One or more criteria partly met* *One or more criteria not met*	**A** **B** **C**

Appendix I:
Clinical study data extraction form






ACKERSON1998

Appendix J: Self-rated and interviewer-based instruments used for screening for depression

Table 24: Self-report questionnaires relevant to children and young people with depression

Name	Age range	Intended use	Time needed	Reliability	Validity	Sensitivity to change
BDI	Adults but used in adolescents	Assessing severity – mainly clinical populations	21 items – 5–10 minutes	Good in clinical adolescents; adequate in non-clinical	Borderline adequate in adolescents – problems in specificity	Proven in adults only
CDI	7–12 years	Assessing severity – mainly clinical populations	27 items 10–20 minutes	Adequate in children only	Cut-off scores problematic; limited data >12 years	Adequate but scores drop off with 2nd use (panel effects)
MFQ & SMFQ	8–18 years	Assessing severity – epidemiological and clinical populations	33 items (full) 13 items (short) 5–10 minutes	Good in adolescents; fair in children	Good	Good
RADS	13–17 years	Assessing severity – epidemiological and clinical populations	30 items 10 minutes	Good in non-clinical populations; limited data in clinical	Good in non-clinical subjects – limited data in clinical	Proven but moderate sensitivity
CES-D & CES-DC	Adults and adolescents	Assessing severity – epidemiological and clinical populations	20 items 5–10 minutes	Adequate in adults; not good in adolescents	Not good – problems with specificity	Not proven

Table 25: Self-report questionnaires relevant to children and young people with depression

Name	Category	Age range	Intended use	Time needed	Reliability	Validity	Sensitivity to change
K-SADS	Interviewer-based	6–18 years	Qualified/trained staff	1.5–3 hours for full schedule	Borderline to adequate	Limited data suggest adequacy	Not proven but used as such with some effect
DISC	Respondent-based	6–17 years	Trained lay persons for epidemiological studies	1–2 hours for full schedule	Adequate in adolescents: good in latest version	Not good in clinical subjects; otherwise adequate	Not proven
DICA-R and DICA-IV-A	Respondent-based	6–17 years	Highly trained lay persons for clinical and research diagnoses	1–2 hours for full schedule	DICA-R not good; DICA-IV-A good in preliminary study	Not good in clinical subjects otherwise good in adolescents	Not proven
CAPA	Interviewer-based	9–17 years	Highly trained lay persons for clinical and research diagnoses	1–2 hours for full schedule	Good in the one published study	Limited data suggest adequacy	Not known

Appendix K: Common forms of self-help

The most common forms of self-help involve exercise, sleep and relaxation, diet, the internet, complementary/alternative therapies, and voluntary organisations.

1 Exercise

Exercise is generally considered beneficial and an integral aspect of a healthy lifestyle. Physical activity during childhood is particularly important for the healthy growth and development of the musculoskeletal, cardiovascular, respiratory and endocrine systems with long-term beneficial consequences in the form of reduced risks of coronary heart disease, hypertension, stroke, colon cancer and diabetes (US Department of Health and Human Services, 1996; Department of Health, 2004). Physical activity promotes psychological well-being in children and has been found to exert a weak effect on reducing stress, anxiety and depression in adolescents (Calfas & Taylor, 1994).

Nearly half of all young people 12 to 21 years of age are not vigorously active; moreover, physical activity sharply declines during adolescence. Childhood and adolescence may thus be pivotal times for preventing sedentary behaviour among adults by maintaining the habit of physical activity throughout the school years. School-based interventions have been shown to be successful in increasing physical activity levels.

With respect to depressed individuals, psychological-based explanations suggest that exercise serves to interrupt dysfunctional thoughts, provides a distraction from negative thoughts and, if undertaken in a group setting, increases opportunities for social interaction (Jorm *et al.,* 2002). Exercise also stimulates physiological changes by increasing levels of monoamine neurotransmitters that mediate stress and depressive reactions and releasing endorphins which enhance the immune system, relieve pain, reduce stress, and postpone the aging process.

2 Sleep and relaxation

A lack of sleep can cause a loss of energy, irritability in the morning and late in the day, headaches due to tension and anxiety and poor concentration. After having had a bad night's sleep some people try to 'catch up' by sleeping during the day. Sleeping at irregular times can further disturb circadian rhythms and lead to a longer-term problem. Sleep and relaxation are essential for maintaining health.

Depressed people often experience changes in their sleep patterns. Some actually sleep more than normal, whilst others have difficulty getting off to sleep, wake early, or are unable to get back to sleep. Anxiety and agitation can also cause frequent waking during the night.

Self-help options for sleep problems may include the use of a light box to correct circadian rhythms, physical exercise to prepare the body for sleep, and relaxation

techniques like yoga to soothe anxiety (see Chapter 5 for further information about the evidence regarding the effectiveness of relaxation).

3 Diet

The following advice has been promoted as being important in supporting physical and mental well-being by the Department of Health:

- Healthy diet (5 portions of fruit and vegetables). A search of articles in the popular media has identified the following as potentially ameliorating depressive symptoms:
  - Omega 3
  - Selenium
  - Magnesium.

4 Internet

With at least 100,000 websites dedicated to the provision of health information, it is not surprising that seeking health information is one of the commonest reasons for using the internet (Fox & Rainie, 2000; Powell & Clarke, 2002). Mental health sites provide email contact, bulletin boards, chat rooms, web telephony, videoconferencing, community treatment programmes operating via email, web training, guided self-help through downloadable self-help guides (also known as bibliotherapy), fee-based and free health communication systems delivering tailored treatments and electronic support groups (Christensen & Griffiths, 2003).

Children and young people who feel unable to ask for help from either formal or informal sources are increasingly turning to the internet as an accessible, informal, confidential source of information (Borzekowski & Rickert, 2001; Gould *et al*., 2002; Nicholas *et al.*, 2004). Seventy-four percent of children aged 9 to 19 in the UK currently have internet access via a computer, games console or digital television (Livingstone & Bober, 2004).

Quality of information available on websites is an issue as there is no requirement for internet sites to be evidence-based or ethically sound. Even though a wide range of organisations have developed methods and tools for evaluating and rating the quality of websites (Wilson, 2002), healthcare professionals would be best advised to only recommend those owned by an organisation and supported by a professional editorial board (Griffiths & Christensen, 2000). In the UK, quality assured mental health information is accessible through the National Electronic Library for Health (Christensen & Griffiths, 2003).

5 Complementary/alternative therapies

There are many thousands of alternative/complementary therapies, some with a long, oral tradition of success. Service users are increasingly demanding a more holistic approach to their treatment and complementary therapies are beginning to find their place in mainstream care.[1]

[1]See *National Guidelines for the Use of Complementary Therapies in Supportive and Palliative Care*, The Prince of Wales Foundation for Integrated Health 2003.

Children, young people and/or their families may choose to use complementary therapies, herbal remedies or nutritional supplements as a self-help intervention for the management of depressive symptoms. They may feel that these complementary treatments are more natural or safe, however, harm and benefit profiles of these treatments have not been convincingly established and it is a largely unregulated industry.

6 Voluntary organisations

The following voluntary groups were identified through the expertise of the Guideline Development Group. All of these groups had websites, services and/or publication lists at the time of the review. Young Minds was contacted to establish which of these were most useful to our explicit criteria of self-help. These are included in our self-help resources table (Table 26). All organisations were registered charities and/or quality assured and evaluated with respect to their work with children.

Table 26: Voluntary groups relevant to children and young people with depression

Organisation	Contact
Action for Sick Children	www.actionforsickchildren.org
Barnados	www.barnardos.org.uk
Charlie Waller Memorial Trust	www.cwmt.org
Childline	www.childline.org.uk
Children's Express	www.childrens-express.org
Depression Alliance	www.depressionalliance.org
Kidscape	www.kidscape.org.uk
Mental Health Foundation	www.mhf.org.uk
Mind	www.mind.org.uk
National Children's Bureau	www.ncb.org.uk
National Children's Homes	www.nch.org.uk
National Youth Advocacy Service	www.nyas.net
NSPCC	www.nspcc.org.uk
Papyrus	www.papyrus-uk.org
Rethink	www.nsf.org.uk
Samaritans	www.samaritans.org
SANE	www.sane.org.uk
The Children's Society	www.childrenssociety.org.uk
The Eating Disorders Association	www.edauk.com
Who Cares? Trust	www.thewhocarestrust.org.uk
Young Minds	www.youngminds.org.uk

Appendix L: Self-help resources

The following table (Table 27) lists self-help resources and indicates the level of evidence for the intervention (in adults where available) as an indication of its possible benefits in older adolescents.

Table 27: Self-help resources relevant to children and young people with depression

Self-help material	Type	Evidence	Comment
Control Your Depression ISBN: 0671762427	Workbook, based on CBT	RCT evidence for adults	American publication. Can be used alone or as a resource for a group. Instructors' manual available. No recent evidence of effectiveness.
Mind Over Mood ISBN: 0898621283	Workbook, based on CBT	No trials reported	Designed to encourage therapists to use it as an adjunct to therapy. There is a clinicians' guide.
Overcoming Depression ISBN: 0340763833	Workbook, based on CBT	No trials reported	Designed to be used with healthcare practitioner review – accompanying notes for practitioners. Training materials available.
Think Good, Feel Good: A Cognitive Behaviour Therapy Workbook for Children and Young People ISBN: 0470842903	Workbook, based on CBT	No trials reported	Can be used as homework or self-help material.
Feeling Good: The New Mood Therapy ISBN: 0380810336	Book with worksheets	RCT evidence adults and young people Recommended by therapist	American author. Widely cited and referred to on voluntary organisations websites. Potentially no therapist input needed. (See Chapter 5 for evidence regarding the effectiveness in young people)
Overcoming Depression ISBN 18491191256	Book with worksheets	No trials reported	An extremely popular book, one of the publisher's bestsellers in their 'Overcoming…' range.

Continued

Table 27: *(Continued)*

Self-help material	Type	Evidence	Comment
Depression Alliance Young People and Depression Training Pack	Training manual	No trials reported	A training manual for teachers, parents/main carers. Can also be used by friends of adolescents affected by depression. Part of an awareness raising pack for schools.
Ultrasis Beating the Blues	Interactive multi-media programme	RCT evidence for adults	Designed for use in a primary care setting with practitioner assessment and progress review each week. Installation in other community settings is currently being investigated.
CALIPSO Innovations	CD ROM package	No trials reported	Same material as *Overcoming Depression* self-help workbook. Guided with minimal therapist input.
Climbing Out of Depression ISBN: 0745922481	Book, encourages psychological change	No trials reported	Based on CBT approach but not pure CBT. Some Christian influence.
Depression: The Way Out of Your Prison ISBN: 0415144825	Book, encourages psychological change	No trials reported	Dynamic model but not CBT. Very popular publication.
So Young, So Sad, So Listen ISBN: 090224180X	Book	No trials reported	This text examines the nature and treatment of childhood depression. It explains the causes and dangers of depression in children and young people and gives positive advice about treatment and outlook. It includes suggestions for further reading and a list of helpful organisations. This book is intended mainly for parents and teachers, but could also be of interest to general practitioners, nurses, social workers and child psychologists. Teenagers may also find it useful.

Continued

Table 27: *(Continued)*

Self-help material	Type	Evidence	Comment
Helping Your Depressed Teenager: A Guide for Parents and Caregivers ISBN: 0471621846	Book	No trials reported	A guide to understanding and confronting adolescent depression and suicide. Offers practical advice.
www.rethink.org/at-ease	Website	No trials reported	Interactive mental health website for young people who are experiencing stress or are worried about their thoughts and feelings. Includes a mesage board.
Get Connected Tel: 0808 808 4994 www.getconnected.org.uk	Helpline and website	No trials reported, evaluated service	A free, confidential helpline that aims to offer young people the best help, whatever their problem. They will listen, talk through options, and make suggestions for services that can help. They can connect by phone for free to local services, and text key info to mobiles.
Childline Tel: 0800 11 11 (24 hours)	Helpline	No trials reported, evaluated service	Helpline providing information and advice to children.
Children and Young People Get Depressed Too	Leaflet	No trials reported	Young Minds leaflet for parents providing straight-forward and factual information about depression and services that can help.
Coping with Depression	Leaflet		Charlie Waller Memorial Trust leaflet for older teenagers and adults about depression.
Do You Ever Feel Depressed?	Leaflet	No trials reported	Young Minds leaflet for young people (aged 13–16 years). Talks about how normal it is for people to feel up or down at different times, but highlights the difference between these feelings and more serious longer term depression. Suggests ways in which young people may help themselves or seek help from others.

Continued

Table 27: *(Continued)*

Self-help material	Type	Evidence	Comment
Depression and Young People	Leaflet		Depression Alliance leaflet aimed at young people and their friends/parents. Provides basic infromation and sources of further support.
Depression Alliance Penfriend Scheme	Penfriend scheme	No trials reported; Quality assured service	A letter writing service which aims to put people affected by depression in touch with each other to offer mutual support and coping strategies.

Appendix M: Health economics search results

The database searches for general health economic evidence for depression in children and young people resulted in a total of 203 references. Of these, 16 were identified as potentially relevant.

Secondary searches for additional pharmacoeconomic papers resulted in a further eight references, of which six were initially considered relevant. A further two potentially eligible references were found by handsearching. Full texts of all potentially eligible studies (including those where relevance/eligibility was not clear from the abstract) were obtained and found to meet criteria for cost and/or effectiveness evaluation, a total of 21 papers, organisational sites, and electronic references. (At this stage inclusion was not limited to papers only from the UK.)

Appendix N: Quality checklists for economic studies

13.1 Full economic evaluations

Author: **Date:**

Title:

	Yes	No	NA
Study design			
1. The research question is stated	☐	☐	☐
2. The viewpoint(s) of the analysis are clearly stated	☐	☐	☐
3. The alternatives being compared are relevant	☐	☐	☐
4. The rationale for choosing the alternative programmes or interventions compared is stated	☐	☐	☐
5. The alternatives being compared are clearly described	☐	☐	☐
6. The form of economic evaluation used is justified in relation to the question addressed	☐	☐	☐
Data collection			
1. The source of effectiveness data used are stated	☐	☐	☐
2. Details of the design and results of effectiveness study are given	☐	☐	☐
3. The primary outcome measure(s) for the economic evaluation are clearly stated	☐	☐	☐
4. Methods to value health states and other benefits are stated	☐	☐	☐
5. Details of the subjects from whom valuations were obtained are given	☐	☐	☐
6. Indirect costs (if included) are reported separately	☐	☐	☐
7. Quantities of resources are reported separately from their unit costs	☐	☐	☐
8. Methods for the estimation of quantities and unit costs are described	☐	☐	☐
9. Currency and price data are recorded	☐	☐	☐
10. Details of currency of price adjustments for inflation or currency conversion are given	☐	☐	☐
11. Details of any model used are given	☐	☐	☐
12. The choice of model used and the key parameters on which it is based are justified	☐	☐	☐
Analysis and interpretation of results			
1. Time horizon of costs and benefits is stated	☐	☐	☐
2. The discount rate(s) is stated	☐	☐	☐
3. The choice of rate(s) is justified	☐	☐	☐
4. An explanation is given if costs or benefits are not discounted	☐	☐	☐

5.	Details of statistical tests and confidence intervals are given for stochastic data	☐	☐	☐
6.	The approach to sensitivity analysis is given	☐	☐	☐
7.	The choice of variables for sensitivity analysis is given	☐	☐	☐
8.	The ranges over which the variables are varied are stated	☐	☐	☐
9.	Relevant alternatives are compared	☐	☐	☐
10.	Incremental analysis is reported	☐	☐	☐
11.	Major outcomes are presented in a disaggregated as well as aggregated form	☐	☐	☐
12.	The answer to the study question is given	☐	☐	☐
13.	Conclusions follow from the data reported	☐	☐	☐
14.	Conclusions are accompanied by the appropriate caveats	☐	☐	☐

13.2 Partial economic evaluations

Author: **Date:**

Title:

		Yes	No	NA
Study design				
1.	The research question is stated	☐	☐	☐
2.	The viewpoint(s) of the analysis are clearly stated and justified	☐	☐	☐
Data collection				
1.	Details of the subjects from whom valuations were obtained are given	☐	☐	☐
2.	Indirect costs (if included) are reported separately	☐	☐	☐
1.	Quantities of resources are reported separately from their unit costs	☐	☐	☐
2.	Methods for the estimation of quantities and unit costs are described	☐	☐	☐
3.	Currency and price data are recorded	☐	☐	☐
4.	Details of currency of price adjustments for inflation or currency conversion are given	☐	☐	☐
5.	Details of any model used are given	☐	☐	☐
6.	The choice of model used and the key parameters on which it is based are justified	☐	☐	☐
Analysis and interpretation of results				
1.	Time horizon of costs is stated	☐	☐	☐
2.	The discount rate(s) is stated	☐	☐	☐
3.	Details of statistical tests and confidence intervals are given for stochastic data	☐	☐	☐
4.	The choice of variables for sensitivity analysis is given	☐	☐	☐
5.	Appropriate sensitivity analysis is performed	☐	☐	☐
6.	The answer to the study question is given	☐	☐	☐
7.	Conclusions follow from the data reported	☐	☐	☐
8.	Conclusions are accompanied by the appropriate caveats	☐	☐	☐

Appendix O:
The Four Tier Strategic Framework

Tier	Professionals providing the service include	Function/service
Tier 1		
A primary level of care	• GPs • Health visitors • School nurses • Social workers • Teachers • Juvenile justice workers • Voluntary agencies • Social services	CAMHS at this level are provided by professionals working in universal services who are in a position to: • Identify mental health problems early in their development • Offer general advice • Pursue opportunities for mental health promotion and prevention
Tier 2		
A service provided by professionals relating to workers in primary care	• Child and Adolescent Mental Health Workers • Clinical child psychologists • Paediatricians (especially community) • Educational psychologists • Child and adolescent psychiatrists • Child and adolescent psychotherapists • Community nurses/nurse specialists • Family therapists	CAMHS professionals should be able to offer: • Training and consultation to other professionals (who might be within T1) • Consultation to professional and families • Outreach • Assessment

Tier 3		
A specialised service for more severe, complex or persistent disorders	• Child and adolescent psychiatrists • Clinical child psychologists • Nurses (community or inpatient)	Services offer: • Assessment and treatment • Assessment for referrals to T4 • Contributions to the services, consultation and training at T1 and 2
Tier 4		
Essential tertiary level services such as day units, highly specialised outpatient teams and inpatient units	• Child psychotherapists • Occupational therapists • Speech and language therapists • Art, music and dramatherapists • Family therapists	• Child and adolescent inpatient units • Secure forensic units • Eating disorders units • Specialist teams (e.g. for sexual abuse) • Specialist teams for neuro-psychiatric problems

Department of Health (2004) National Service Framework for Children, Young People and Maternity Services. The Mental Health and Psychological Well-being of Children and Young People. London: HMSO, p47.

11 References

Ackerson, J., Scogin, F., McKendree-Smith, N., *et al.* (1998) Cognitive bibliotherapy for mild and moderate adolescent depressive symptomatology. *Journal of Consulting and Clinical Psychology, 66*, 685–690.

Alloy, L.B., Abramson, L.Y., Whitehouse, W.G., *et al.* (1999) Depressogenic cognitive styles: predictive validity, information processing and personality characteristics, and developmental origins. *Behaviour Research and Therapy, 37*, 503–531.

Ambrosini, P.J., Metz, C., Prabucki, K., *et al.* (1989) Videotape reliability of the third revised edition of the K-SADS. *Journal of the American Academy of Child and Adolescent Psychiatry, 28*, 723–728.

American Academy of Child and Adolescent Psychiatry (AACAP) (1998) Practice parameters for the assessment and treatment of children and adolescents with depressive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 63S–83S.

American Academy of Child and Adolescent Psychiatry (AACAP) (2002) The practice parameter for the use of electroconvulsive therapy with adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, in press. Accessed 27/10/04 http://www.aacap.org/clinical/parameters/index.htm.

American Psychiatric Association (APA) (1994) *Diagnostic and Statistical Manual of Mental Disorders,* 4th edn (DSM-IV). Washington, DC: APA.

Andrews, G., Szabo, M., & Burns, J. (2002) Preventing major depression in young people. *British Journal of Psychiatry, 181*, 460–462.

Angold, A. & Costello, E.J. (1995) A test-retest reliability study of child-reported psychiatric symptoms and diagnoses using the Child and Adolescent Psychiatric Assessment (CAPA-C). *Psychological Medicine, 25*, 755–762.

Angold, A. & Costello, E.J. (2000) The Child and Adolescent Psychiatric Assessment (CAPA). *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 39–48.

Angold, A. & Costello, E.J. (2001) The epidemiology of depression in children and adolescents. In *The Depressed Child and Adolescent*, 2nd edn. (ed. I. M. Goodyer), pp. 143–178. Cambridge Child and Adolescent Psychiatry series. Cambridge: Cambridge University Press.

Angold, A. & Rutter, M. (1992) Effects of age and pubertal status on depression in a large clinical sample. *Development and Psychopathology, 4*, 5–28.

Angold, A., Erkanli, A., Costello, E.J., *et al.* (1996) Precision, reliability and accuracy in the dating of symptom onsets in child and adolescent psychopathology. *The Journal of Child Psychology and Psychiatry, 37*, 657–664.

Angold, A., Costello, E.J., & Worthman, C.M. (1998) Puberty and depression: the roles of age, pubertal status and pubertal timing. *Psychological Medicine, 28*, 51–61.

Angold, A., Erkanli, A., Silberg, J., *et al.* (2002) Depression scale scores in 8–17 year-olds: effects of age and gender. *Journal of Child Psychology and Psychiatry*, *43*, 1052–1063.

AGREE Collaboration (2001) Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument. London: St George's Hospital Medical School (http://www.agreecollaboration.org).

Asarnow, J.R. & Carlson, G.A. (1985) Depression Self-Rating Scale: utility with child psychiatric inpatients. *Journal of Consulting and Clinical Psychology, 53*, 491–499.

Asarnow, J.R., Scott, C.V., & Mintz, J. (2002) A combined cognitive-behavioral family education intervention for depression in children: a treatment development study. *Cognitive Therapy and Research, 26*, 221–229

Baldwin, S. & Oxlad, M. (1996) Multiple case sampling of ECT administration to 217 minors: review and meta-analysis. *Journal of Mental Health, 5*, 451–463.

Bao, W.N., Whitbeck L.B., & Hoyt, D.R. (2000) Abuse, support and depression among homeless and runaway adolescents. *Journal of Health and Social Behaviour, 41*, 408–420.

Baruch, G., Gerber, A., & Fearon, P. (1998) Adolescents who drop out of psychotherapy at a community-based psychotherapy centre: a preliminary investigation of the characteristics of early drop-outs, late drop-outs and those who continue treatment. *British Journal of Medical Psychology, 71*, 233–245.

Baruch, G., Fearon, P., & Gerber, A. (1999) Emotional and behavioural problems in adolescents/young adults receiving treatment at a community-based psychotherapy centre for young people: a preliminary study of the correspondence among adolescent/young adult and significant other reports. *British Journal of Medical Psychology*, *72*, 251–265.

Beardslee, W.R., Keller, M.B., & Lavori, P.W. (1993). The impact of parental affective disorder on depression in offspring: a longitudinal follow-up in a non referred sample. *Journal of the American Academy of Child and Adolescent Psychiatry, 32,* 723–730.

Beardslee, W.R., Gladstone, T.R., Wright, E.J., *et al.* (2003) A family-based approach to the prevention of depressive symptoms in children at risk: evidence of parental and child change. *Pediatrics, 112*, 119–131.

Beck, A.T., Ward, C., Mendelson, M., *et al.* (1961) An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.

Becker, J.V., Kaplan, M.S., Tenke, C.E., *et al.* (1991) The incidence of depressive symptomatology in juvenile sex offenders with a history of abuse. *Child Abuse and Neglect, 15*, 531–536.

Bergen, H.A., Martin, G., Richardson, A.S., *et al.* (2003) Sexual abuse and suicidal behavior: a model constructed from a large community sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 1301–1309.

Berlin, J.A. (1997) Does blinding of readers affect the results of meta-analyses? University of Pennsylvania Meta-Analysis Blinding Study Group. *Lancet*, *350*, 185–186.

Birleson, P., Hudson, I., Buchanan, D.G., *et al.* (1987) Clinical evaluation of a self-rating scale for depressive disorder in childhood (Depression Self-Rating Scale). *Journal of Child Psychology and Psychiatry, 28*, 43–60.

Birmaher, B. & Heydl, P. (2001) Biological studies in depressed children and adolescents. *International Journal of Neuropsychopharmacology, 4*, 149–157.

Birmaher, B., Arbelaez, C., & Brent, D. (2002) Course and outcome of child and adolescent major depressive disorder. *Child & Adolescent Psychiatric Clinics of North America, 11*, 619–637.

Black, D. & Urbanowicz, M.A. (1987) Family intervention with bereaved children. *Journal of Child Psychology and Psychiatry, 28*, 467–476.

Boldero, J. & Fallon, B. (1995) Adolescent help-seeking: what do they get help for and from whom? *Journal of Adolescence, 18*, 193–209.

Borzekowski, D.L. & Rickert, V.I. (2001) Adolescent cybersurfing for health information: a new resource that crosses barriers. *Archives of Pediatric and Adolescent Medicine*, 155, 813–817.

Boys, A., Farrell, M., Taylor, C., *et al.* (2003) Psychiatric morbidity and substance use in young people aged 13–15 years: results from the Child and Adolescent Survey of Mental Health. *British Journal of Psychiatry*, *182*, 509–517.

Brent, D.A., Kolko, D.J., Birmaher, B., *et al.* (1998) Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 906–914.

Brooks, S.J. & Kutcher, S. (2001) Diagnosis and measurement of adolescent depression: a review of commonly utilized instruments. *Journal of Child and Adolescent Psychopharmacology, 11*, 341–376.

Bukowski, W.M., Newcomb, A.F., & Hartup, W.W. (eds) (1996) *The Company They Keep: Friendship in Childhood and Adolescence.* Cambridge: Cambridge University Press.

Burns, J.M., Andrews, G., & Szabo, M. (2002) Depression in young people: what causes it and can we prevent it? *Medical Journal of Australia, 177* (Suppl), S93–S96.

Cairns, R.B., Leung, M.-C., Buchanan, L., *et al.* (1995) Friendships and social networks in childhood and adolescence: fluidity, reliability, and interrelations. *Child Development, 66*, 1330–1345.

Calfas, K.J. & Taylor, W. (1994) Effects of physical activity on psychological variables in adolescents. *Pediatric Exercise Science*, *6*, 406–423.

Campo, J.V., Bridge, J., Ehmann, M., *et al.* (2004) Recurrent abdominal pain, anxiety, and depression in primary care. *Pediatrics, 113*, 817–824.

Carter, R.T. (1995) *The Influence of Race and Racial Identity in Psychotherapy: Toward a Racially Inclusive Model*. New York & Chichester: Wiley.

Caspi, A., Harrington, H., Milne, B., *et al.* (2003a) Children's behavioral styles at age 3 are linked to their adult personality traits at age 26. *Journal of Personality, 71*, 495–513.

Caspi, A., Sugden, K., Moffitt, T.E., *et al.* (2003b) Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene. *Science, 301*(5631), 386–389.

Caughy, M.O., Brodsky, A.E., O'Campo, P.J., *et al.* (2001) Perceptions of parenting: individual differences and the effect of community. *American Journal of Community Psychology, 29*, 679–699.

Christensen, H. & Griffiths, K. (2003) The internet and mental health practice. *Evidence Based Mental Health*, *6*, 66–69.

Cochrane Collaboration (2003) *Review Manager (RevMan) Version 4.2 for Windows.* Oxford: Cochrane Collaboration.

Cohen, D., Taieb, O., Flament, M., *et al.* (2000) Absence of cognitive impairment at long-term follow-up in adolescents treated with ECT for severe mood disorder. *American Journal of Psychiatry, 157*, 460–462.

Committee on Safety of Medicines (CSM) (2000) Important interactions between St John's wort (Hypericum perforatum) preparations and prescribed medicines. www.mca.gov.uk

Committee on Safety of Medicines (CSM) (2003) Selective serotonin reuptake inhibitors (SSRIs): overview of regulatory status and CSM advice relating to major depressive disorder (MDD) in children and adolescents including a summary of available safety and efficacy data. http://medicines.mhra.gov.uk/ourwork/monitorsafequalmed/safetymessages/ssrioverview_101203.htm.

Cooper, P.J. & Goodyer, I.M. (1993) A community study of depression in adolescent girls. 1: Estimates of symptom and syndrome prevalence. *British Journal of Psychiatry, 163*, 369–374, 379–380.

Cornwell, B. (2003) The dynamic properties of social support: decay, growth, and staticity, and their effects on adolescent depression. *Social Forces, 81*, 953–978.

Costello, E.J. & Angold, A. (1988) Scales to assess child and adolescent depression: checklists, screens, and nets. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*, 726–737.

Costello, E.J., Edelbrock, C.S., & Costello, A.J. (1985) Validity of the NIMH Diagnostic Interview Schedule for Children: a comparison between psychiatric and paediatric referrals. *Journal of Abnormal Child Psychology, 13*, 579–595.

Costello, A.J., Dulcan, M.K., & Kalas, R. (1991) A checklist of hospitalization criteria for use with children. *Hospital and Community Psychiatry, 42*, 823–828.

Costello, E.J., Angold A., Burns, B.J., *et al.* (1996a) The Great Smoky Mountains Study of Youth. Functional impairment and serious emotional disturbance. *Archives of General Psychiatry, 53*, 1137–1143.

Costello, E.J., Angold, A., Burns, B.J., *et al.* (1996b) The Great Smoky Mountains Study of Youth. Goals, design, methods, and the prevalence of DSM-III-R disorders. *Archives of General Psychiatry, 53*, 1129–1136.

Costello, E.J., Angold A., & Keeler, G.P. (1999) Adolescent outcomes of childhood disorders: the consequences of severity and impairment. *Journal of the American Academy of Child and Adolescent Psychiatry, 38,* 121–128.

Costello, E.J., Pine, D.S., Hammen, C., *et al.* (2002) Development and natural history of mood disorders. *Biological Psychiatry, 52*, 529–542.

Cotgrove, A. (2001) The adolescent unit. In *Adolescent Psychiatry in Clinical Practice* (ed. S. G. Gowers), pp. 321–345. London: E. Arnold.

Cowie, H., Naylor, P., Talamelli, L., *et al.* (2002) Knowledge, use of and attitudes towards peer support: a 2-year follow-up to the Prince's Trust survey. *Journal of Adolescence, 25,* 453–467.

Coyle, J.T., Pine, D.S., Charney, D.S., *et al.* (2003) Depression and bipolar support alliance consensus statement on the unmet needs in diagnosis and treatment of mood disorders in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 1494–1503.

CPPRG (2002) The implementation of the Fast Track program: an example of a large-scale prevention science efficacy trial. *Journal of Abnormal Child Psychology, 30,* 1–17.

Curry, M. & Bromfield, C. (1994) *Personal and Social Education for Primary Schools through Circle-Time*. Stafford: National Association of Special Education Needs.

Dahl, R.E., Ryan, N.D., Matty, M.K., *et al.* (1996) Sleep onset abnormalities in depressed adolescents. *Biological Psychiatry, 39*, 400–410.

Dawkins, J. (1995) Bullying in schools: doctors' responsibilities. *BMJ, 310,* 274–275.

Deeks, J.J. (2002) Issues in the selection of a summary statistic for meta-analysis of clinical trials with binary outcomes. *Statistics in Medicine, 21*, 1575–1600.

Dekker, M.C., Koot, H.M., Van der Ende, J., *et al.* (2002) Emotional and behavioral problems in children and adolescents with and without intellectual disability. *Journal of Child Psychology and Psychiatry, 43,* 1087–1098.

Department for Education and Skills (DfES) (2002) *Bullying: Don't Suffer in Silence – An Anti-bullying Pack for Schools.* London: DfES Publications.

Department of Health (1996) *Primary Care: Delivering the Future?* London: HMSO.

Department of Health (2001) *The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century*. London: Department of Health.

Department of Health (2003) *Expert Briefing: Self-help Interventions for Mental Health Problems.* National Institute for Mental Health in England. www.nimhe.org.uk.

Department of Health (2004) *Child and Adolescent Mental Health – National Service Framework for Children, Young People and Maternity Services.* London: Department of Health Publications.

DerSimonian, R. & Laird, N. (1986) Meta-analysis in clinical trials. *Controlled Clinical Trials, 7,* 177–188.

Diamond, G.S., Reis, B.F., & Diamond, G.M. (2002) Attachment-based family therapy for depressed adolescents: a treatment development study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *41*, 1190–1196.

Dierker, L.C., Albano, A.M., Clarke, G.N., *et al.* (2001) Screening for anxiety and depression in early adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 929–936.

Dohrenwend, B.P. (1990) 'The problem of validity in field studies of psychological disorders' revisited. *Psychological Medicine, 20*, 195–208.

Domitrovich, C.E. & Greenberg, M.T. (2000) The Study of Implementation: current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation*, *11*, 193–221.

Downs, W.R. & Rose, S.R. (1991) The relationship of adolescent peer groups to the incidence of psychosocial problems. *Adolescence, 26*, 473–492.

Drummond, M., O'Brien, B., Stoddart, G., *et al*. (1997) *Methods for the Economic Evaluation of Health Care Programmes,* 2nd edn. Oxford: Oxford University Press.

Dubow, E.F., Lovko, K.R., Jr., & Kausch, D.F. (1990) Demographic differences in adolescents' health concerns and perceptions of helping agents. *Journal of Clinical Child Psychology, 19,* 44–54.

Duff, G. (2003a) Safety of Seroxat (paroxetine) in children and adolescents under 18 years – contraindication in the treatment of depressive illness. Epinet message from Professor G. Duff, Chairman of Committee on Safety of Medicines. http://medicines.mhra.gov.uk/ourwork/monitorsafequalmed/safetymessages/seroxat18.pdf [accessed 10 December 2003].

Duff, G. (2003b) Safety of venlafaxine in children and adolescents under 18 years in the treatment of depressive illness. Epinet message from Professor G. Duff, Chairman of the Committee on Safety of Medicines. http://medicines.mhra.gov.uk/ourwork/monitorsafequalmed/safetymessages/efexor0903.pdf [accessed 10 December 2003].

Duff, G. (2003c) Selective serotonin reuptake inhibitors – use in children and adolescents with major depressive disorder. Epinet message from Professor G. Duff, Chairman of the Committee on Safety of Medicines http://medicines.mhra.gov.uk/ourwork/monitorsafequalmed/safetymessages/cemssri_101203.pdf [accessed 10 December 2003].

Duffett, R., Hill, P., & Lelliott, P. (1999) Use of electroconvulsive therapy in young people. *British Journal of Psychiatry, 175*, 228–230.

Dumont, M. & Provost, M.A. (1999) Resilience in adolescents: protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *Journal of Youth and Adolescence, 28*, 343–363.

Eccles, M. & Mason, J. (2001) How to develop cost-conscious guidelines. *Health Technology Assessment, 5*, 1–69.

Eccles, M., Freemantle, N., & Mason, J. (1998) North of England evidence based guideline development project: methods of developing guidelines for efficient drug use in primary care. *BMJ, 316,* 1232–1235.

Edelbrock, C., Costello, A.J., Dulcan, M.K., *et al.* (1985) Age differences in the reliability of the psychiatric interview of the child. *Child Development, 56*, 265–275.

Egger, H.L., Angold, A., & Costello, E.J. (1998) Headaches and psychopathology in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 951–958.

Egger, H.L., Costello, E.J., Erkanli, A., *et al.* (1999) Somatic complaints and psychopathology in children and adolescents: stomach aches, musculoskeletal pains, and headaches. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 852–860.

Eley, T.C., Tahir, E., Angleitner, A., *et al.* (2003) Association analysis of MAOA and COMT with neuroticism assessed by peers. *American Journal of Medical Genetics, 120B*, 90–96.

Emslie, G.J., Rush, A.J., Weinberg, W.A., *et al.* (1998) Fluoxetine in child and adolescent depression: Acute and maintenance treatment. *Depression & Anxiety, 7*, 32–39.

Emslie, G.J., Mayes, T.L., Laptook, R.S., *et al.* (2003) Predictors of response to treatment in children and adolescents with mood disorders. *Psychiatric Clinics of North America, 26*, 435–456.

Ezzell, C.E., Swenson, C.C. & Brondino, M.J. (2000) The relationship of social support to physically abused children's adjustment. *Child Abuse and Neglect, 24*, 641–651.

Farrell, K., Wicks, M.N. & Martin, J.C. (2004) Chronic disease self-management improved with enhanced self-efficacy. *Clinical Nursing Research, 13*, 289–308.

Feder, A., Coplan, J.D., Goetz, R.R., *et al.* (2004) Twenty-four-hour cortisol secretion patterns in prepubertal children with anxiety or depressive disorders. *Biological Psychiatry, 56*, 198–204.

Fine, S., Forth, A., Gilbert, M., *et al.* (1991) Group therapy for adolescent depressive disorder: a comparison of social skills and therapeutic support. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 79–85.

Fisher, P.W., Shaffer, D., Piacentini, J.C., *et al.* (1993) Sensitivity of the Diagnostic Interview Schedule for Children, 2nd edn (DISC-2.1) for specific diagnoses of children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 666–673.

Flomenhaft, K. (1974) Outcome of treatment for adolescents. *Adolescence, 9*, 57–66.

Fombonne, E., Wostear, G., Cooper, V., *et al.* (2001a) The Maudsley long-term follow-up of child and adolescent depression: 1. Psychiatric outcomes in adulthood. *British Journal of Psychiatry, 179*, 210–217.

Fombonne, E., Wostear, G., Cooper, V., *et al.* (2001b) The Maudsley long-term follow-up of child and adolescent depression: 2. Suicidality, criminality and social dysfunction in adulthood. *British Journal of Psychiatry, 179,* 218–223.

Fonagy, P., Target, M., Cottrell, D., *et al.* (2002) *What Works For Whom?: A Critical Review of Treatments for Children and Adolescents*. New York & London: Guilford Press.

Food and Drug Administration (2004) Public Health Advisory: suicidality in children and adolescents being treated with antidepressant medications. http://www.fda.gov/cder/drug/antidepressants/SSRIPHA200410.htm [accessed 26 October 2004].

Fox, S. & Rainie, L. (2000) The online health care revolution: how the web helps Americans take better care of themselves. The Pew Internet and American Life Project. Available at: http://www.pewinternet.org/.

Galaif, E.R., Sussman, S., Chou, C.P., *et al.* (2003) Longitudinal relations among depression, stress, and coping in high risk youth. *Journal of Youth and Adolescence, 32*, 243–258.

Garber, J., Kriss, M.R., Koch, M., *et al.* (1988) Recurrent depression in adolescents: a follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*, 49–54.

Garralda, E. (1986) In-patient treatment of children: a psychiatric perspective. In *Current Issues in Clinical Psychology* (ed. G. Edwards), vol. 4. New York: Plenum Press.

Garrison, C.Z., Addy, C.L., Jackson, K.L., *et al.* (1991) The CES-D as a screen for depression and other psychiatric disorders in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 636–641.

Geller, B., Cooper, T.B., Farooki, Z.Q., *et al.* (1985) Dose and plasma levels of nortriptyline and chlorpromazine in delusionally depressed adolescents and of nortriptyline in nondelusionally depressed adolescents. *American Journal of Psychiatry, 142*, 336–368.

Gillham, J.E., Shatte, A.J., & Freres, D.R. (2000) Preventing depression: a review of cognitive-behavioral and family interventions. *Applied & Preventative Psychology, 9*, 63–88.

Goodman, R. (1998) The longitudinal stability of psychiatric problems in children with hemiplegia. *Journal of Child Psychology and Psychiatry, 39*, 347–354.

Goodman, R., Ford, T., Richards, H., *et al*. (2000) The Development and Well-Being Assessment: description and initial validation of an integrated assessment of child and adolescent psychopathology. *Journal of Child Psychology and Psychiatry*, *41*, 645–655.

Goodyer, I.M. (1996) Physical symptoms and depressive disorders in childhood and adolescence [editorial]. *Journal of Psychosomatic Research, 41*, 405–408.

Goodyer, I.M. (2001) Life events: their nature and effects. In *The Depressed Child and Adolescent.* (ed. I. M. Goodyer), pp. 204–233. Cambridge Child and Adolescent Psychiatry series. Cambridge: Cambridge University Press.

Goodyer, I.M. (ed.) (2003) *Unipolar Depression: A Lifespan Perspective*. Oxford & New York: Oxford University Press.

Goodyer, I.M. & Cooper, P.J. (1993) A community study of depression in adolescent girls. II: The clinical features of identified disorder. *British Journal of Psychiatry, 163*, 374–380.

Goodyer, I.M., Wright, C., & Altham, P. (1990) The friendships and recent life events of anxious and depressed school-age children. *British Journal of Psychiatry, 156*, 689–698.

Goodyer, I.M., Ashby, L., Altham, P.M., *et al.* (1993) Temperament and major depression in 11 to 16 year olds. *Journal of Child Psychology and Psychiatry, 34,* 1409–1423.

Goodyer, I.M., Herbert, J., Altham, P.M., *et al.* (1996) Adrenal secretion during major depression in 8- to 16-year-olds. I: Altered diurnal rhythms in salivary cortisol and dehydroepiandrosterone (DHEA) at presentation. *Psychological Medicine, 26*, 245–256.

Goodyer, I.M., Herbert, J., Tamplin, A., *et al.* (2000a) Recent life events, cortisol, dehydroepiandrosterone and the onset of major depression in high-risk adolescents. *British Journal of Psychiatry, 177*, 499–504.

Goodyer, I.M., Herbert, J., Tamplin, A., *et al.* (2000b) First-episode major depression in adolescents. Affective, cognitive and endocrine characteristics of risk status and predictors of onset. *British Journal of Psychiatry, 176*, 142–149.

Goodyer, I.M., Park, R.J., & Herbert, J. (2001) Psychosocial and endocrine features of chronic first-episode major depression in 8–16 year olds. *Biological Psychiatry, 50*, 351–357.

Goodyer, I.M., Herbert, J., & Tamplin, A. (2003) Psychoendocrine antecedents of persistent first-episode major depression in adolescents: a community-based longitudinal enquiry. *Psychological Medicine, 33*, 601–610.

Gould, M.S., Munfakh, J.L., Lubell, K., *et al.* (2002) Seeking help from the internet during adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *41*, 1182–1189.

Gowers, S., Bailey-Rogers, S., Shore, A., *et al.* (2000) The Health of the Nation Outcome Scales for Child and Adolescent Mental Health (HoNOSCA). *Child Psychology and Psychiatry Review, 5*, 50–56.

Gowers, S., Clarke, J., Alldis, M., *et al.* (2001) Inpatient admission of adolescents with mental disorder. *Clinical Child Psychology and Psychiatry, 6*, 537–544.

Green, J. (2002) Provision of intensive treatment: in-patient units, day units and intensive outreach. In *Child and Adolescent Psychiatry: Modern Approaches* (eds M. Rutter & E. Taylor), pp. 1038–1050. London: Blackwell.

Green, J. & Jones, D. (1998) Unwanted effects of in-patient treatment: anticipation, prevention, repair. In *In-patient Child Psychiatry: Modern Practice, Research and the Future* (eds J. Green and B. Jacobs), pp. 212–220. London: Routledge.

Green, J., Kroll, L., Imrie, D., *et al.* (2001) Health gain and outcome predictors during inpatient and related day treatment in child and adolescent psychiatry. *Journal of American Academy of Child and Adolescent Psychiatry, 40*, 325–332.

Greenberg, M.T. & Kusche, C. (1998) *Promoting Alternative Thinking Strategies (PATHS).* Blueprints for Violence Prevention, Book Ten. Boulder, Colorado, USA: Center for the Study and Prevention of Violence, Institute of Behavioural Science, University of Colorado, Boulder.

Greenberg, P.E., Kessler, R.C., Birnbaum, H.G., *et al.* (2003) The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry, 64,* 1465–1475.

Griffiths, K.M. & Christensen, H. (2000) Quality of web based information on treatment of depression: cross sectional survey. *BMJ*, 321, 1511–1515.

Haby, M.M., Tonge, B., Littlefield, L., *et al.* (2004) Cost-effectiveness of cognitive behavioural therapy and selective serotonin reuptake inhibitors for major depression in children and adolescents. *Australian and New Zealand Journal of Psychiatry, 38,* 579–591.

Halligan, S.L., Herbert, J., Goodyer, I.M., *et al.* (2004) Exposure to postnatal depression predicts elevated cortisol in adolescent offspring. *Biological Psychiatry, 55*, 376–381.

Hammad, T.A. (2004) Review and evaluation of clinical data. http://www.fda.gov/ohrms/dockets/ac/04/briefing/2004–4065b1–10-TAB08-Hammads-Review.pdf [Accessed 27 August 2004].

Hammen, C. & Brennan, P.A. (2003) Severity, chronicity, and timing of maternal depression and risk for adolescent offspring diagnoses in a community sample. *Archives of General Psychiatry, 60*, 253–258.

Hammen, C., Burge, D., Burney, E., *et al.* (1990) Longitudinal study of diagnoses in children of women with unipolar and bipolar affective disorder. *Archives of General Psychiatry, 47*, 1112–1117.

Hammen, C., Rudolph, K., Weisz, J., *et al.* (1999) The context of depression in clinic-referred youth: neglected areas in treatment. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 64–71.

Hammen, C., Shih, J.H., & Brennan, P.A. (2004) Intergenerational transmission of depression: test of an interpersonal stress model in a community sample. *Journal of Consulting and Clinical Psychology, 72*, 511–522.

Harrington, R. (2001) Depression, suicide and deliberate self-harm in adolescence. *British Medical Bulletin, 57*, 47–60.

Harrington, R. & Dubicka, B. (2001) Natural history of mood disorders in children and adolescents. In *The Depressed Child and Adolescent* (ed. I. M. Goodyear), pp. 311–343. Cambridge Child and Adolescent Psychiatry series. Cambridge: Cambridge University Press.

Harrington, R., Kerfoot, M., Dyer, E., *et al.* (1998) Randomized trial of a home-based family intervention for children who have deliberately poisoned themselves. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 512–518.

Harris, T.L. & Molock, S.D. (2000) Cultural orientation, family cohesion, and family support in suicide ideation and depression among African American college students. *Suicide Life Threatening Behaviour, 30,* 341–353.

Hartup, W.W. (1996) The company they keep: friendships and their developmental significance. *Child Development, 67*, 1–13.

Hawker, D.S. & Boulton, M.J. (2000) Twenty years' research on peer victimization and psychosocial maladjustment: a meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, 41*, 441–455.

Henderson, A.R. (1993) Assessing test accuracy and its clinical consequences: a primer for receiver operating characteristic curve analysis. *Annals of Clinical Biochemistry, 30*, 521–539.

Henderson, A.S., Korten, A.E., Jorm, A.F., *et al.* (2000) COMT and DRD3 polymorphisms, environmental exposures, and personality traits related to common mental disorders. *American Journal of Medical Genetics, 96*, 102–107.

Henggeler, S.W., Rowland, M.D., Randall, J., *et al.* (1999) Home-based multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis: clinical outcomes. *Journal of American Academy of Child and Adolescent Psychiatry, 38*, 1331–1339.

Herbert, J., Goodyer, I.M., Altham, P.M., *et al.* (1996) Adrenal secretion and major depression in 8- to 16-year-olds. II. Influence of co-morbidity at presentation. *Psychological Medicine, 26*, 257–263.

Herjanic, B. & Reich, W. (1982) Development of a structured psychiatric interview for children: agreement between child and parent on individual symptoms. *Journal of Abnormal Child Psychology, 10*, 307–324.

Higgins, J.P.T. & Thompson, S.G. (2002) Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine, 21*, 1539–1558.

Hodes, M. (2004) Refugee children in the UK. In *Mental Health Services for Minority Ethnic Children and Adolescents (*eds M. Malek & C. Joughin), pp. 152–168. London: Jessica Kingsley.

Hodgins, S. & Ellenbogen, M. (2003) Neuroticism and depression. *British Journal of Psychiatry, 182*, 79–80; author reply 80.

Incomes Data Services (2003) *IDS Report*. R893/2. http://www.incomesdata.co.uk/indexreport2003.

Jackson, S.W. (1986) *Melancholia and Depression: From Hippocratic Times to Modern Times*. Newhaven, Conn.: Yale University Press.

Jacobs, B.W., Green, J., Beecham, J. *et al.* (2004) CHYPIE: The Children and Young Persons Inpatient Evaluation Study. http://kc.nimhe.org.uk/index.cfm?fuseaction=Item.viewResource&intItemID=45078

Jadad, A.R., Moore, R.A., Carroll, D., *et al.* (1996) Assessing the quality of reports of randomized clinical trials: Is blinding necessary? *Controlled Clinical Trials, 17,* 1–12.

Jaffee, S.R., Moffitt, T.E., Caspi, A., *et al.* (2002) Differences in early childhood risk factors for juvenile-onset and adult-onset depression. *Archives of General Psychiatry, 59*, 215–222.

Joint Royal College of Paediatrics and Child Health/Neonatal and Paediatric Pharmacists Group Standing Committee on Medicines (2000) *The Use of Unlicensed Medicines or Licensed Medicines for Unlicensed Applications in Paediatric Practice – Policy Statement*. London: Royal College of Paediatrics and Child Health.

Jorm, A.F., Christensen, H., Griffiths, K.M., *et al.* (2002) Effectiveness of complementary and self-help treatments for depression. *Medical Journal of Australia*, *176* (Suppl), S84–96.

Kashani, J.H., Reid, J.C., & Rosenberg, T.K. (1989) Levels of hopelessness in children and adolescents: a developmental perspective. *Journal of Consulting and Clinical Psychology, 57*, 496–499.

Kaufman, J., Birmaher, B., Brent, D., *et al.* (1997) Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL): initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 980–988.

Kelvin, R.G., Goodyer, I.M., Teasdale, J.D., *et al.* (1999) Latent negative self-schema and high emotionality in well adolescents at risk for psychopathology. *Journal of Child Psychology and Psychiatry, 40*, 959–968.

Kendler, K.S., Thornton, L.M., & Gardner, C.O. (2000) Stressful life events and previous episodes in the etiology of major depression in women: an evaluation of the 'kindling' hypothesis. *American Journal of Psychiatry, 157*, 1243–1251.

Kendler, K.S., Thornton, L.M., & Gardner, C.O. (2001) Genetic risk, number of previous depressive episodes, and stressful life events in predicting onset of major depression. *American Journal of Psychiatry, 158*, 582–586.

Kendler, K.S., Gardner, C.O., & Prescott, C.A. (2002) Toward a comprehensive developmental model for major depression in women. *American Journal of Psychiatry, 159*, 1133–1145.

Kendler, K.S., Kuhn, J., & Prescott, C.A. (2004) The interrelationship of neuroticism, sex, and stressful life events in the prediction of episodes of major depression. *American Journal of Psychiatry, 161*, 631–636.

Kent, L., Vostanis, P., & Feehan, C. (1997) Detection of major and minor depression in children and adolescents: evaluation of the Mood and Feelings Questionnaire. *Journal of Child Psychology and Psychiatry, 38*, 565–573.

Kind, P. & Sorensen, J. (1993) The costs of depression. *International Clinical Psychopharmacology, 7*, 191–195.

King, C.A., Hovey, J.D., Brand, E., *et al.* (1997) Prediction of positive outcomes for adolescent psychiatric inpatients. *Journal of American Academy of Child and Adolescent Psychiatry, 36*, 1434–1442.

Knapp, M., McCrone, P., Fombonne, E., *et al.* (2002) The Maudsley long-term follow-up of child and adolescent depression: 3. Impact of comorbid conduct disorder on service use and costs in adulthood. *British Journal of Psychiatry, 180*, 19–23.

Knapp, M. & Ilson, S. (2002) Economic aspects of depression and its treatment. *Current Opinion in Psychiatry*, *58* (Suppl 15), 12–18.

Kolvin, I. & Sadowski, H. (2001) childhood depression: clinical phenomenology and classification. *The Depressed Child and Adolescent,* 2nd edn (ed. I. Goodyer), pp. 119–142. Cambridge Child and Adolescent Psychiatry series. Cambridge: Cambridge University Press.

Kovacs, M. (1992) *The Children's Depression Inventory Manual*. New York: Multi-Health Systems, Inc.

Kovacs, M., Akiskal, H.S., Gatsonis, C., *et al.* (1994) Childhood-onset dysthymic disorder. Clinical features and prospective naturalistic outcome. *Archives of General Psychiatry, 51*, 365–374.

Kraemer, H.C., Kazdin, A., Offord, D.R., *et al.* (1997) Coming to terms with the terms of risk. *Archives of General Psychiatry*, *54*, 337–343.

Kumpulainen, K., Rasanen, E., Henttonen, I., *et al.* (1998) Bullying and psychiatric symptoms among elementary school-age children. *Child Abuse and Neglect, 22*, 705–717.

Kutash, K. & Rivera, V.R. (1996) *What Works in Children's Mental Health Services? Uncovering Answers to Critical Questions*. Baltimore, MD & London: Paul H. Brooks.

LeBlanc, J.C., Almudevar, A., Brooks, S.J., *et al.* (2002) Screening for adolescent depression: Comparison of the Kutcher Adolescent Depression Scale with the Beck depression inventory. *Journal of Child and Adolescent Psychopharmacology, 12*, 113–126.

Lewis, G., Anderson, L., Araya, R., *et al.* (2003) Self-help interventions for mental health problems. www.nimhe.org.uk/expertbriefings.

Livingstone, S. & Bober, M. (2004) *UK Children go Online: Surveying the Experiences of Young People and their Parents*. London, Media@LSE. Available at http://www.children-go-online.net.

Luby, J.L., Heffelfinger, A.K., Mrakotsky, C., *et al.* (2003) The clinical picture of depression in preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 340–348.

Lucas, C.P., Zhang, H., Fisher, P.W., *et al.* (2001) The DISC Predictive Scales (DPS): efficiently screening for diagnoses. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 443–449.

Lyubomirsky, S. & Nolen-Hoeksema, N. (1995) Effects of self-focused rumination on negative thinking and interpersonal problem solving. *Journal of Personality and Social Psychology, 69*, 176–190.

Malek, M. & Joughin, C. (eds) (2004) *Mental Health Services for Minority Ethnic Children and Adolescents*. London: Jessica Kingsley.

Martinez, R.S. & Semrud-Clikeman, M. (2004) Emotional adjustment and school functioning of young adolescents with multiple versus single learning disabilities. *Journal of Learning Disability, 37,* 411–420.

Maskey, S. (1998) The process of admission. In *In-patient Child Psychiatry: Modern Practice, Research and the Future* (eds J. Green and B. Jacobs), pp. 39–50. London: Routledge.

McCauley, E., Mitchell, J.R., Burke, P., *et al.* (1988) Cognitive attributes of depression in children and adolescents. *Journal of Consulting and Clinical Psychology, 56*, 903–908.

McGee, R. & Williams, S. (1988) A longitudinal study of depression in nine-year-old children. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*, 342–348.

McWilliams, L. (2003) Neuroticism and depression. *British Journal of Psychiatry, 182*, 80; author reply 80.

Meltzer, H., Gatward, R., Goodman, R., *et al.* (2000) The *Mental Health of Children and Adolescents in Great Britain*. The report of a survey carried out in 1999 by Social Survey Division of the Office for National Statistics on behalf of the Department of Health, the Scottish Health Executive and the National Assemby for Wales. London: The Stationery Office.

Meltzer, H., Gatward, R., Goodman, R., *et al.* (2003a) Mental health of children and adolescents in Great Britain. *International Review of Psychiatry, 15*, 185–187.

Meltzer, H., Corbin, T., Gatward, R., *et al.* (2003b) *The Mental Health of Young People Looked After by Local Authorities in England*. Report of a survey carried out in 2002 by the Survey Division of the Office for National Statistics on behalf of the Department of Health. London: The Stationery Office.

Messer, S.C., Angold, A., Loeber, R., *et al.* (1995) The development of a short questionnaire for use in epidemiological studies of depression in children and adolescents: factor composition and structure across development. *International Journal of Methods in Psychiatric Research, 5*, 251–262.

Messer, S. & Gross, A. (1995) Childhood depression and family interaction: a naturalistic observation study. *Journal of Clinical Child Psychology, 24*, 77–88.

Meyer, N.E., Dyck, D.G., & Petrinack, R.J. (1989) Cognitive appraisal and attributional correlates of depressive symptoms in children. *Journal of Abnormal Child Psychology, 17*, 325–336.

Meyerson, L.A., Long, P.J., Miranda, R. Jr, *et al.* (2002) The influence of childhood sexual abuse, physical abuse, family environment, and gender on the psychological adjustment of adolescents. *Child Abuse and Neglect, 26*, 387–405.

Mitchell, J., McCauley, E., Burke, P.M., *et al.* (1988) Phenomenology of depression in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*, 12–20.

National Institute for Clinical Excellence (NICE) (2002) *Guideline Development Methods: Information for National Collaborating Centres and Guideline Developers.* London: National Institute for Clinical Excellence.

National Institute for Clinical Excellence (NICE) (2003) *Guidance on the Use of Electroconvulsive Therapy.* Technology Appraisal No. 59. London: National Institute for Clinical Excellence.

National Institute for Clinical Excellence (NICE) (2004) *Depression: Management of Depression in Primary and Secondary Care*. London: National Institute for Clinical Excellence.

National Institute for Health and Clinical Excellence (NICE) (forthcoming 2006) *Bipolar Disorder: Management of Bipolar Disorder in Adults, Children and Young People in Primary and Secondary Care*.

Naylor, P. & Cowie, H. (1999) The effectiveness of peer support systems in challenging school bullying: the perspectives and experiences of teachers and pupils. *Journal of Adolescence, 22,* 467–479.

Newton, C., Taylor, G., & Wilson, D. (1996) Circles of friends: an inclusive approach to meeting emotional and behavioural needs. *Educational Psychology in Practice, 11,* 41–48.

NHS Executive (1996) *Clinical Guidelines: Using Clinical Guidelines to Improve Patient Care Within the NHS.* London: Department of Health.

NHS Health Advisory Service (1995) *Child and Adolescent Mental Health Services*: *Together We Stand: The Commissioning, Role and Management of Child and Adolescent Mental Health Services.* London: HMSO.

Nicholas, J., Oliver, K., Lee, K. *et al.* (2004) Help-seeking behaviour and the internet: An investigation among Australian adolescents. *Australian e-journal for the Advancement of Mental Health, 3*(1). www.auseinet.com/journal/vol3iss1/nicholas.pdf

Nolen-Hoeksema, S. (2000) The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology, 109*, 504–511.

Nuechterlein, K.H. & Dawson, M.E. (1984) A heuristic vulnerability/stress model of schizophrenic episodes. *Schizophrenia Bulletin, 10*, 300–312.

O'Herlihy, A., Worrall, A., Lelliott, P., *et al.* (2003) Distribution and characteristics of in-patient child and adolescent mental health services in England and Wales. *British Journal of Psychiatry, 183*, 547–551.

O'Herlihy, A., Worrall, A., Lelliott, P., *et al*. (2004) Characteristics of the residents of in-patient child and adolescent mental health services in England and Wales. *Clinical Child Psychology and Psychiatry, 9,* 579–588.

Offer, D., Howard, K.I., Schonert, K.A., *et al.* (1991) To whom do adolescents turn for help? Differences between disturbed and nondisturbed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 623–630.

Offord, D.R., Kraemer, H.C., Kazdin, A.E., *et al.* (1998) Lowering the burden of suffering from child psychiatric disorder: trade-offs among clinical, targeted, and universal interventions. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 686–694.

Olsson, G. & von Knorring, A.L. (1997) Depression among Swedish adolescents measured by the self-rating scale Center for Epidemiology Studies-Depression Child (CES-DC). *European Journal of Child and Adolescent Psychiatry, 6*, 81–87.

Olweus, D. (1993) *Bullying at School: What We Know and What We Can Do*. Oxford: Blackwell.

Olweus, D. (1994) Annotation: Bullying at school: basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry, 7*, 1171–1190.

Park, R.J. & Goodyer, I.M. (2000) Clinical guidelines for depressive disorders in childhood and adolescence. *European Child and Adolescent Psychiatry, 9*, 147–161.

Park, R.J., Goodyer, I.M., & Teasdale, J.D. (2004) Effects of induced rumination and distraction on mood and overgeneral autobiographical memory in adolescent Major Depressive Disorder and controls. *Journal of Child Psychology and Psychiatry, 45*, 996–1006.

Patten, C.A., Gillin, J.C., Farkas, A.J., *et al.* (1997) Depressive symptoms in California adolescents: family structure and parental support. *Journal of Adolescent Health, 20,* 271–278.

Pavuluri, M. & Birmaher, B. (2004) A practical guide to using ratings of depression and anxiety in child psychiatric practice. *Current Psychiatry Reports*, *6*, 108–116.

Perez-Smith, A., Spirito, A., & Boergers, J. (2002) Neighborhood predictors of hopelessness among adolescent suicide attempters: preliminary investigation. *Suicide and Life-Threatening Behavior, 32*, 139–145.

Personal Social Services Research Unit (PSSRU) (2003) *Unit Costs of Health and Social Care 2003* (eds A. Netten & L. Curtis). Canterbury: University of Kent at Canterbury & PSSRU.

Pfeiffer, S. & Strzelecki, S. (1990) Inpatient psychiatric treatment of children and adolescents: a review of outcome studies. *Journal of the American Academy of Child and Adolescent Psychiatry, 29*, 847–853.

Pincus, H.A., Davis, W.W., & McQueen, L.E. (1999) 'Subthreshold' mental disorders. A review and synthesis of studies on minor depression and other 'brand names'. *British Journal of Psychiatry, 174*, 288–296.

Pine, D.S. (2002) Treating children and adolescents with selective serotonin reuptake inhibitors: how long is appropriate? *Journal of Child & Adolescent Psychopharmacology, 12*, 189–203.

Post, R.M. (1992) Transduction of psychosocial stress into the neurobiology of recurrent affective disorder. *American Journal of Psychiatry, 149*, 999–1010.

Post, R.M., Rubinow, D.R., & Ballenger, J.C. (1986) Conditioning and sensitisation in the longitudinal course of affective illness. *British Journal of Psychiatry, 149*, 191–201.

Pottick, K., Hansell, S., Gutterman, E., *et al.* (1995) Factors associated with inpatient and outpatient treatment for children and adolescents with serious mental illness. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 425–433.

Powell, J. & Clarke, A. (2002) The WWW of the World Wide Web: who, what, and why? *Journal of Medical Internet Research*, *4*, e4.

Pritchard, C. (2001) *A Family-Teacher-Social Work Alliance to Reduce Truancy and Delinquency: The Dorset Healthy Alliance Project*. RDS Occasional Paper no 78. Great Britain: Home Office, Research Development and Statistics Directorate.

Radloff, L.S. (1977) The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.

Ramchandani, P. (2004) Treatment of major depressive disorder in children and adolescents. *BMJ*, *328,* 3–4.

Ramchandani, P. & Jones, D.P. (2003) Treating psychological symptoms in sexually abused children: from research findings to service provision. *British Journal of Psychiatry, 183*, 484–490.

Reich, W. (2000a) Diagnostic interview for children and adolescents (DICA). *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 59–66.

Reich, W. (2000b) More on the DICA. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 14–15.

Reich, W., Herjanic, B., Welner, Z., *et al.* (1982) Development of a structured psychiatric interview for children: agreement on diagnosis comparing child and parent interviews. *Journal of Abnormal Child Psychology, 10*, 325–336.

Reid, J.B., Eddy, J.M., Fetrow, R.A., *et al.* (1999) Description and immediate impacts of a preventive intervention for conduct problems. *American Journal of Community Psychology, 27*, 483–517.

Rey, J.M. & Walter, G. (1997) Half a century of ECT use in young people. *American Journal of Psychiatry, 154*, 595–602.

Reynolds, I. & Rob, M.I. (1988) The role of family difficulties in adolescent depression, drug-taking and other problem behaviours. *The Medical Journal of Australia, 149*, 250–256.

Reynolds, W. & Coates, K. (1986) A comparison of cognitive-behavioral therapy and relaxation training for the treatment of depression in adolescents. *Journal of Consulting and Clinical Psychology, 54*, 653–660.

Reynolds, W.M. (1987) *Reynolds Adolescent Depression Scale: Professional Manual.* Odessa, Florida: Psychological Assessment Resources.

Rice, F., Harold, G., & Thapar, A. (2002) The genetic aetiology of childhood depression: a review. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 43*, 65–79.

Rickwood, D.J. & Braithwaite, V.A. (1994) Social-psychological factors affecting help-seeking for emotional problems. *Social Science and Medicine, 39*, 563–572.

Rigby, K. (1999) Peer victimisation at school and the health of secondary school students. *British Journal of Educational Psychology, 69,* 95–104.

Roberts, R.E., Lewinsohn, P.M., & Seeley, J.R. (1991) Screening for adolescent depression: a comparison of depression scales. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 58–66.

Robertson, C., Freeman, C.P.L., & Fergusson, G. (1997). ECT in Scotland. *Psychiatric Bulletin, 21*, 699–702.

Rothery, D., Wrate, R., McCabe, R., *et al.* (1995) Treatment goal-planning outcome findings of a British prospective multi-centre study of adolescent inpatient units. *European Child Adolescent Psychiatry, 4*, 209–220.

Rueter, M.A., Scaramella, L., Wallace, L.E., *et al.* (1999) First onset of depressive or anxiety disorders predicted by the longitudinal course of internalizing symptoms and parent-adolescent disagreements. *Archives of General Psychiatry, 56*, 726–732.

Rutter, M., Maugham, B., Mortimore, P., *et al.* (1979) *Fifteen Thousand Hours: Secondary Schools and their Effects on Children*. London: Open Books.

Ryan, N.D., Puig-Antich, J., Ambrosini, P., *et al.* (1987) The clinical picture of major depression in children and adolescents. *Archives of General Psychiatry*, *44*, 854–861.

Sadowski, H., Ugarte, B., Kolvin, I. *et al.* (2002) Early life family disadvantages and major depression in adulthood. *British Journal of Psychiatry, 174*, 112–120.

Salmon, G., James, A., & Smith, D.M. (1998) Bullying in schools: self reported anxiety, depression and self esteem in secondary school children. *British Medical Journal, 317*, 924–925.

Salmon, G., James, A., Cassidy, E.C., *et al.* (2000) Bullying: a review. Presentations to an adolescent psychiatric service and within a school for emotionally and behaviourally disturbed children. *Clinical Child Psychology and Psychiatry, 5*, 563–579.

Sandler, I.N., Ayers, T.S., Wolchik, S.A., *et al.* (2003) The family bereavement program: efficacy evaluation of a theory-based prevention program for parentally bereaved children and adolescents. *Journal of Consulting and Clinical Psychology, 71*, 587–600.

Schraedley, P.K., Gotlib, I.H., & Hayward, C. (1999) Gender differences in correlates of depressive symptoms in adolescents. *Journal of Adolescent Health, 25*, 98–108.

Schwab-Stone, M.E., Shaffer, D., Dulcan, M.K., *et al.* (1996) Criterion validity of the NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3). *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 878–888.

Sen, S., Villafuerte, S., Nesse, R., *et al.* (2004) Serotonin transporter and GABAA alpha 6 receptor variants are associated with neuroticism. *Biological Psychiatry, 55*, 244–249.

Shaffer, D. (1988) The epidemiology of teen suicide: an examination of risk factors. *Journal of Clinical Psychiatry, 49* (Suppl), 36–41.

Shaffer, D., Schwab-Stone, M., Fisher, P., *et al.* (1993) The Diagnostic Interview Schedule for Children-Revised Version (DISC-R): I. Preparation, field testing, interrater reliability, and acceptability. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 643–650.

Shaffer, D., Fisher, P., Dulcan, M.K., *et al.* (1996) The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA Study. Methods for the Epidemiology of Child and Adolescent Mental Disorders Study. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 865–877.

Shaffer, D., Fisher, P., Lucas, C.P., *et al.* (2000) NIMH Diagnostic Interview Schedule for Children Version IV (NIMH DISC-IV): description, differences from previous versions, and reliability of some common diagnoses. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 28–38.

Sheerin, T., Maguire, R., & Robinson, J. (1999) A 15 month follow-up study of children admitted to a child psychiatric inpatient unit. *Irish Journal of Psychological Medicine, 16*, 97–103.

Shiner, R.L., Masten, A.S., & Roberts, J.M. (2003) Childhood personality foreshadows adult personality and life outcomes two decades later. *Journal of Personality, 71*, 1145–1170.

Shochet, I. & Dadds, M. (1997) Adolescent depression and the family: a paradox. *Clinical Child Psychology and Psychiatry,* 2, 307–312.

Smith, P.K. & Sharp, S. (eds) (1994) *School Bullying: Insights and Perspectives.* London: Routledge.

Smith, P.K. & Shu, S. (2000) What good schools can do about bullying: findings from a survey in English schools after a decade of reaserach and action. *Childhood, 7,* 193–212.

Sokolov, S. & Kutcher, S. (2001) Adolescent depression: Neuroendocrine aspects. In *The Depressed Child and Adolescent* (ed. I. M. Goodyer), pp. 233–266. Cambridge Child and Adolescent Psychiatry series. Cambridge: Cambridge University Press.

Spasojevic, J. & Alloy, L.B. (2001) Rumination as a common mechanism relating depressive risk factors to depression. *Emotion, 1*, 25–37.

Stallings, M.C., Cherny, S.S., Young, S.E., *et al.* (1997) The familial aggregation of depressive symptoms, antisocial behavior, and alcohol abuse. *American Journal of Medical Genetics, 74*, 183–191.

Stark, K.D. & Laurent, J. (2001) Joint factor analysis of the Children's Depression Inventory and the Revised Children's Manifest Anxiety Scale. *Journal of Clinical Child Psychology, 30*, 552–567.

Stark, K.D., Reynolds, W.M., & Kaslow, N.J. (1987) A comparison of the relative efficacy of self-control therapy and a behavioral problem-solving therapy for depression in children. *Journal of Abnormal Child Psychology, 15*, 91–113.

Taieb, O., Cohen, D., Mazet, P., *et al.* (2000) Adolescents' experiences with ECT (letter to the editor). *Journal of the American Academy of Child and Adolescent Psychiatry, 39,* 943–944.

Tamplin, A. & Goodyer, I.M. (2001) Family functioning in adolescents at high and low risk for major depressive disorder. *European Child and Adolescent Psychiatry, 10*, 170–179.

Tamplin, A., Goodyer, I.M., & Herbert, J. (1998) Family functioning and parent general health in families of adolescents with major depressive disorders. *Journal of Affective Disorders, 48*, 1–13.

Teasdale, J.D. & Cox, S.G. (2001) Dysphoria: self-evaluative and affective components in recovered depressed patients and never depressed controls. *Psychological Medicine*, *31*, 1311–1316.

Thompson, D. (1995) *The Concise Oxford English Dictionary*. Oxford: Clarendon Press.

Thomas, C.M. & Morris, S. (2003) Cost of depression among adults in England in 2000. *British Journal of Psychiatry, 183,* 514–519.

Tiet, Q.Q., Bird, H.R. Davies, M., *et al.* (1998) Adverse life events and resilience. *Journal of the American Academy of Child and Adolescent Psychiatry, 37*, 1191–1200.

United Nations (UN) Population Division (November 2004) Replacement migration. Age-sex structures by scenario for 2000. http://www.un.org/esa/population/publications/migration/uk.pdf.

US Department of Health and Human Services (1996) *Physical Activity and Health: A Report of the Surgeon General.* Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Atlanta, USA.

Walter, G., Rey, J.M., & Mitchell, P.B. (1999a) Practitioner review: Electroconvulsive therapy in adolescents. *Journal of Child Psychology and Psychiatry, 40*, 325–334.

Walter, G., Koster, K., & Rey, J.M. (1999b) Electroconvulsive therapy in adolescents: experience, knowledge and attitudes of recipients. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 594–599.

Walter, G., Koster, K., & Rey, J.M. (1999c) Views about treatment among parents of adolescents who received electroconvulsive therapy. *Psychiatric Services, 50,* 701–702.

Weissberg, R.P., Kumpfer, K.L., & Seligman, M.E. (2003) Prevention that works for children and youth. An introduction. *American Psychology, 58*, 425–432.

Wilson, P. (2002) How to find the good and avoid the bad or ugly: a short guide to tools for rating quality of health information on the internet. *British Medical Journal, 324,* 598–602.

Welner, Z., Reich, W., Herjanic, B., *et al.* (1987) Reliability, validity, and parent-child agreement studies of the Diagnostic Interview for Children and Adolescents (DICA). *Journal of the American Academy of Child and Adolescent Psychiatry, 26*, 649–653.

West Midlands Information Service (2003) UKMi Midlands cost comparison chart. www.ukmicentral.nhs.uk/pressupp/costs/4_3_antidepress.PDF.

Wiesz, J.R., Weiss, B., Han, S.S. *et al.* (1995) Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcome studies. *Psychological Bulletin, 117*, 450–468.

Winsberg, B., Bialer, I., Kupietz, S., *et al.* (1980) Home vs hospital care of children with behavior disorders: a controlled investigation. *Archives of General Psychiatry, 37*, 413–418.

Wolchik, S.A., Wilcox, K.L., Tein, J.Y., *et al.* (2000) Maternal acceptance and consistency of discipline as buffers of divorce stressors on children's psychological adjustment problems. *Journal of Abnormal Child Psychology, 28*, 87–102.

Wolkind, S. & Gent, M. (1987) Children's psychiatric in-patient units: present functions and future directions. Special Issue: *Residential Provision. Maladjustment and Therapeutic Education, 5*, 54–56.

Wood, A., Kroll, L., Moore, A., *et al.* (1995) Properties of the mood and feelings questionnaire: a research note. *Journal of Child Psychology and Psychiatry, 36*, 327–334.

World Health Organization (1992) *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines.* Geneva: WHO.

World Health Organization (2001) *Mental Health Problems: The Undefined and Hidden Burden*. Fact Sheet No. 218. http://www.who.int/mediacentre/factsheets/fs218/en/index.html.

Wrate, R., Rothery, D., McCabe, R., *et al.* (1994) A prospective multi-centre study of admissions to adolescent in-patient units. *Journal of Adolescence, 17*, 221–237.

Yule, W. & Udwin, O. (1991) Screening child survivors for post-traumatic stress disorders: experiences from the 'Jupiter' sinking. *British Journal of Clinical Psychology, 30*, 131–138.

Yule, W., Udwin, O., & Murdoch, K. (1990) The 'Jupiter' sinking: effects on children's fears, depression and anxiety. *Journal of Child Psychology and Psychiatry, 31*, 1051–1061.

Zill, P., Engel, R., Baghai, T.C., *et al.* (2002) Identification of a naturally occurring polymorphism in the promoter region of the norepinephrine transporter and analysis in major depression. *Neuropsychopharmacology, 26*, 489–493.

12 Abbreviations

ADHD	Attention deficit hyperactivity disorder
AMED	Allied and Complementary Medicine Database
ANCOVA	Analysis of covariance
Asberg SES	Asberg Side Effects Scale
AUC	Area under the curve
BDI	Beck Depression Inventory
BID	Bellevue Index of Depression
CAMHS	Child and Adolescent Mental Health Service(s)
CAPA	The Child and Adolescent Psychiatric Assessment
CBT	Cognitive behavioural therapy
CDI	Children's Depression Inventory
CDRS	Children's Depression Rating Scale
CDRS-R	Children's Depression Rating Scale Revised
CES-D	The Center for Epidemiological Studies- Depression Scale
CES-DC	The Center for Epidemiological Studies- Depression Scale for children
C-GAS	Child Global Assessment Scale
CGI-I	Clincial Global Impressions – Global Improvement Scale
CGI-S	Clincial Global Impressions – Severity of Illness Scale
CHMP	Committee on Human Medicinal Products
CI	Confidence interval
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CSM	Committee on Safety of Medicines
DALY	Disability adjusted life year
DAWBA	The Development and Well-Being Assessment
DfES	Department for Education and Skills
DICA-R	The Diagnostic Interview for Children and Adolescents-Revised
DICA-IV A	The Diagnostic Interview for Children and Adolescents-Second revision for adolescents
DISC	The Diagnostic Interview Schedule for Children
DSM	Diagnostic and Statistical Manual of the American Psychiatric Association (versions III, III-R and IV)
ECT	Electroconvulsive therapy
EMBASE	Excerpta Medica Database
EMEA	The European Medicines Evaluation Agency
FBP	Family Bereavement Program
FDA	(US) Food and Drugs Administration
GAF	Global Assessment for Functioning
GDG	Guideline development group
GP	General practitioner

GPP	Good practice point
GSH	Guided self-help
HDRS	Hamilton Depression Rating Scale
HoNOSCA	Health of the Nation Outcome Scale for Children and Adolescents
ICD-10	International Classification of Disease, 10th edition
IPT	Interpersonal psychotherapy
K	Number of studies
K-SADS	Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children
MAOI	Monoamine oxidase inhibitor
MEDLINE	Compiled by the US National Library of Medicine (NLM) and published on the web by Community of Science, MEDLINE is a source of life sciences and biomedical bibliographic information
MFQ	Mood and Feelings Questionnaire (MFQ-C child version, MFQ-P parent version, SMFQ short version)
MDD	Major depressive disorder
MHRA	Medicines and Healthcare products Regulatory Agency
MST	Multi-systemic therapy
N	Total number of participants
NCCMH	National Collaborating Centre for Mental Health
NICE	National Institute for Clinical Excellence
NHS	National Health Service
NNT-H	Number needed to treat (harm)
NNT-B	Number needed to treat (benefit)
NPV	Negative predictive value
NSF	National Service Framework (for children)
PCT	Primary Care Trust
PPV	Positive predictive value
PsycINFO	An abstract (not full text) database of psychological literature from the 1800s to the present
RADS	The Reynolds Adolescent Depression Scale
RCT	Randomised controlled trial
RDC	Research diagnostic criteria
RR	Relative risk (risk ratio)
SD	Standard deviation
SIGLE	System for Information on Grey Literature in Europe
SIQ	Suicide Ideation Questionnaire
SMD	Standardised mean difference
SNRI	Serotonin and noradrenalin reuptake inhibitors
SSRIs	Selective serotonin reuptake inhibitors
WHO	World Health Organization
WL	Waitlist

13 Glossary

Active listening: A way of listening that focuses entirely on what the other person is saying and confirms understanding of both the content of the message and the emotions and feelings underlying the message to ensure that understanding is accurate.

Adherence: The behaviour of taking medicine according to treatment dosage and schedule as intended by the prescriber. In this guideline, the term adherence is used in preference to the term compliance, but is not synonymous with concordance, which has a number of different uses/meanings.

Adverse drug reactions: Any undesirable experience that results from the administration of a pharmacologically active agent.

Affective disorder: A syndrome in which an individual experiences a significant alteration in affect or mood. Whether depressed or elated, this change of mood is accompanied by alteration in the individual's activity levels.

Art therapy: A psychological therapy that uses art materials to help the patient explore and express his or her feelings.

Bipolar disorder: This condition is also known as manic depression. It is an illness that affects mood, causing a person to switch between feeling very low (depression) and very high (mania).

Care Programme Approach: Introduced in 1991, this approach was designed to ensure that different community services are coordinated and work together towards a particular person's care. This approach requires that professionals from the health authority and local authority get together to arrange care, and applies to all patients accepted for care by the specialist mental health services.

Child: An individual aged 5–11 years.

Child and Adolescent Psychiatric assessment (CAPA): An interviewer-based diagnostic interview with versions for use with children and their parents.

Chronic depression: A form of depression, marked by a course of illness lasting 2 years or more.

Clinical questions: Questions posed by the guideline development group which are used to guide the identification and interrogation of the evidence base relevant to the topic of the guideline.

Cognitive behavioural therapies (CBT): A range of behavioural and cognitive behavioural therapies, in part derived from the cognitive-behavioural model of affective disorders in which the patient works collaboratively with a therapist using a shared formulation to achieve specific treatment goals, which may include recognising the impact of behavioural and/or thinking patterns on feeling states and encouraging

alternative cognitive and/or behavioural coping skills to reduce the severity of target symptoms and problems.

Cohort study (also known as follow-up, incidence, longitudinal, or prospective study): An observational study in which a defined group of people (the cohort) is followed over time. Outcomes are compared in subsets of the cohort who were exposed or not exposed (or exposed at different levels) to an intervention or other factor of interest.

Committee on Safety of Medicines (CSM): The CSM is one of the independent advisory committees established under the Medicines Act (Section 4) which advises the UK Licensing Authority (Government Health Ministers) on the quality, efficacy and safety of medicines in order to ensure that appropriate public health standards are met and maintained.

Comorbidity: Two or more diseases or conditions occurring at the same time, such as depression and anxiety.

Confidence interval (CI): The range within which the 'true' values (e.g. size of effect of an intervention) are expected to lie with a given degree of certainty (e.g. 95% or 99%). (Note: confidence intervals represent the probability of random errors, but not systematic errors or bias.)

Conversational technique: This term is used in the guideline to emphasise the importance of a two-way communication. A collaboration between patient and healthcare professional aims to ensure that the patient feels able to express their feelings in the healthcare setting safe in the knowledge that their healthcare professional will listen.

Costs (direct): The costs of all the goods, services and other resources that are consumed in the provision of a health intervention. They can be medical or non-medical.

Costs (indirect): The lost productivity suffered by the national economy as a result of an employee's absence from the workplace through illness, decreased efficiency or premature death.

Counselling: In its broadest sense refers to a psychological therapy that allows people to explore their symptoms and problems with a trained individual. The emphasis is on enabling the patient to help themselves and does not involve giving advice or directing the patient to take specific actions. It is usually delivered on an individual basis although can also be delivered in groups. The term counselling is sometimes used interchangeably with a number of specific psychological therapies.

Depression (major depressive disorder [MDD]): The guideline uses the ICD-10 definition in which 'an individual usually suffers from depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatiguability and diminished activity. Marked tiredness after only slight effort is common. Other symptoms are: (a) reduced concentration and attention; (b) reduced self-esteem and self-confidence; (c) ideas of guilt and unworthiness (even in a mild type of episode); (d) bleak and pessimistic views of the future; (e) ideas or acts of self-harm or suicide; (f) disturbed sleep; (g) diminished appetite.'

Depression unresponsive to treatment: A term used to describe depression that has failed to respond to two or more antidepressants at an adequate dose for an adequate duration given sequentially.

Double blind (also termed double masked): A trial in which neither the participants nor the investigators (outcome assessors) are aware of which intervention the participants are given. The purpose of blinding the participants (recipients and providers of care) is to prevent **performance bias**. The purpose of blinding the investigators (outcome assessors) is to protect against **detection bias**.

Dysphoria: An emotional state characterised by malaise, anxiety, depression or unease.

Dysthymia: A chronic lowering of mood that does not fulfil the criteria for recurrent depressive disorder, of mild or moderate severity, in terms of either severity or duration of individual episodes. There are variable phases of minor depression and comparative normality. Despite tiredness, feeling down and not enjoying very much, people with dysthymia are usually able to cope with everyday life.

Effect size: An estimate of the size of the effect that a given treatment has compared with a control treatment (for example, another active treatment, no treatment or 'treatment as usual'). Examples of effect sizes are the relative risk statistic (used for dichotomous outcomes), and the weighted mean difference and standardised mean difference statistics (both used for continuous outcomes).

Effectiveness: The extent to which a specific intervention, when used under ordinary circumstances, does what it is intended to do. Clinical trials that assess effectiveness are sometimes called management trials.

Efficacy: The extent to which an intervention produces a beneficial result under ideal conditions. Clinical trials that assess efficacy are sometimes called explanatory trials and are restricted to participants who fully cooperate. The randomised controlled trial is the accepted 'gold standard' for evaluating the efficacy of an intervention.

Electroconvulsive therapy (ECT) (also termed convulsive therapy, electroshock therapy or shock therapy): A therapeutic procedure in which an electric current is briefly applied to the brain to produce a seizure. This is used for treatment of severe depression symptoms or to ease depression that is not responding well to other forms of treatment.

Family therapy: Family therapy sessions based on systemic, cognitive behavioural or psychoanalytic principles, which may include psychoeducational, problem-solving and crisis management work, and might involve specific interventions with a depressed child or young person.

Forest plot: A graphical display of results from individual studies on a common scale, allowing visual comparison of trial results and examination of the degree of heterogeneity between studies.

Funnel plot: A scatter plot used to assess publication bias within a set of studies in a meta-analysis. Publication bias can occur when studies finding a favourable result are published in favour of those finding an unfavourable result. It plots estimated treatment

effects against a measure of studies' sample sizes. If no publication bias is present, the plot should resemble an inverted funnel with the results of smaller studies being more widely scattered than those of larger studies.

Good practice point (GPP): Recommended good practice based on the clinical experience of the Guideline Development Group.

Guided self-help (GSH): A self-administered intervention designed to treat depression, which makes use of a range of books or a self-help manual that is based on an evidence-based intervention and is designed specifically for the purpose.

Guideline development group (GDG): The group of academic experts, clinicians and patients responsible for developing the guideline.

Guideline implementation: Any intervention designed to support the implementation of guideline recommendations.

Guideline recommendation: A systematically developed statement that is derived from the best available research evidence, using predetermined and systematic methods to identify and evaluate evidence relating to the specific condition in question.

Healthcare professional: A generic term used in this guideline to cover all health professionals such as GPs, psychologists, psychotherapist, psychiatrists, paediatricians, school doctors, nurses (including school and community based), health visitors, counsellors, art therapists, music therapists, dramatherapists and family therapists who work with children and young people and whose work may involve considering the young person's additional psychological needs.

Health Technology Appraisal: The process of determining the clinical and cost effectiveness of a health technology in order to develop recommendations on the use of new and existing medicines and other treatments within the NHS in England and Wales.

Heterogeneity: A term used to illustrate the variability or differences between studies in the estimates of effects.

Homogeneity: A term used to illustrate when there are no or minor variations in the directions and degrees of results between individual studies that are included in the systematic review.

Interpersonal psychotherapy (IPT or IPT-A): A discrete, time-limited, structured psychological intervention, derived from the interpersonal model of affective disorders that focuses on interpersonal issues and where therapist and patient work collaboratively to: (1) identify the effects of key problematic areas related to interpersonal conflicts, role transitions, grief and loss, and social skills, and their effects on current symptoms, feelings states and/or problems; (2) seek to reduce symptoms by learning to cope with or resolve these interpersonal problem areas. IPT-A is an adaptation of this therapy for adults, for use with adolescents suffering from depression.

Kiddie Schedule for Affective Disorders and Schizophrenia for School Age Children (K-SADS): An interviewer-led procedure for diagnostic assessment of depression

including the severity of current episode designed to be used by trained individuals with some clinical experience for use with participants aged 6–17 years.

Meta-analysis: The use of statistical techniques in a systematic review to integrate the results of several independent studies.

Mild depression: The guideline uses the ICD-10 definition of 4–6 depressive symptoms.

Moderate depression: The guideline uses the ICD-10 definition of 7–9 depressive symptoms.

Monoamine oxidase inhibitor (MAOI): A class of antidepressants that help brain neuotransmitters remain active longer, which may lead to a reduction in symptoms of depression

Mood and Feelings Questionnaire (MFQ): A self-report measure used to screen for depression. **MFQ-C** is the child version; **MFQ-P** is used by parents to screen for depression in their child.

Multidisciplinary: For the purposes of this guideline this term refers to professionals who are involved in the care of a child or young person working in partnership across all tiers. These are likely to include healthcare professionals (including CAMHS staff, GPs, health visitors and school nurses), teachers, social services and voluntary agencies.

Multidisciplinary review: A comprehensive review of the child or young person's situation that involves staff additional to the therapist(s) delivering treatment. This review should consider a range of sources of information including evidence of functioning at home, school and other relevant settings and should take account of the wishes of the child or young person and their family.

Non-directive supportive therapy (NDST): This intervention involves the planned delivery of direct individual contact time with an empathic, concerned and skilled non-specialist CAMHS professional to offer emotional support and non-directive problem-solving as appropriate and to review the child or young person's state (for example depressive symptoms, school attendance, suicidality, recent social activities) in order to assess whether more specialist help is needed.

Placebo: A non-drug, or physically inactive substance (sugar, distilled water, or saline solution), which is given as part of a clinical research trial. It has no specific pharmacological activity against illness.

Primary mental health workers (PMHW): Sometimes also called 'mental health link workers'. This role was described in NHS Health Advisory Service 1995 and was recommended as a way of improving the relationship, communication and collaboration between specialist mental health services (CAMHS) and the wider network of services working with children, for example schools, youth and community services, primary care, and so on. Primary mental health workers tend to operate in tiers 1 and 2. In some parts of the UK, including Scotland, this has led to the establishment of PMHW posts. In other areas the role has been developed, but delivered in a variety of ways. In some cases, workers are employed specifically to deliver primary mental health work, whilst in others, this work is achieved though an extension of pre-existing professional roles.

Psychoanalytic/psychodynamic child psychotherapy: Psychological therapies derived from a psychoanalytic/psychodynamic model and where:

1. Therapist and patient explore and gain insight into conflicts and problem behaviours, modes of thought and relating and how these are represented in current situations and relationships including the therapy relationship (for example, transference and counter-transference).

2. This leads to patients being given an opportunity to explore through play, drawing, talking and behaviour, feelings, and conscious and unconscious conflicts, originating in the past or in learnt behaviour. The technical focus is on interpreting and working though conflicts and recurrent problematic areas of behaviour and relating as they manifest in the therapeutic situation.

3. Therapy is non-directive and recipients are not taught specific skills (for example, thought monitoring, re-evaluating, or problem-solving).

Psychoeducation: Programmes for individual patients or groups of patients that involve an explicitly described educational interaction between the intervention provider and the patient or carer as the prime focus of the study.

Psychological therapies: A group of treatment methods which involve psychosocial rather than physical intervention. They include cognitive behavioural therapy, family therapy, systemic family therapy, non-directive supportive therapy, psychodynamic psychotherapy, group psychotherapy, counselling, art therapy, interpersonal psychotherapy, guided self-help and any other form of therapy which aims to be helpful through the communication of thoughts and feelings in the presence of a therapist, who works with the material using a systematic framework for understanding and responding to it.

Psychosis: A condition in which an individual is not in contact with reality. This can include: sensing things that are not really there (hallucinations); having beliefs that are not based on reality (delusions); problems in thinking clearly; and not realising that there is anything wrong with themselves (called 'lack of insight').

Racial identity status: An individual's perception of himself or herself as belonging to a racial group; also the beliefs, morals and attitudes that one shares with a particular racial group in contrast with other groups. It has been suggested that racial identity is integral to personality and is a key dynamic factor in psychotherapeutic dyads.

Randomisation: A method used to generate a random allocation sequence, such as using tables of random numbers or computer-generated random sequences. The method of randomisation should be distinguished from concealment of allocation, because if the latter is inadequate, selection bias may occur despite the use of randomisation. For instance, a list of random numbers may be used to randomise participants, but if the list were open to the individuals responsible for recruiting and allocating participants, those individuals could influence the allocation process, either knowingly or unknowingly.

Randomised controlled trial (RCT) (also termed randomised clinical trial): An experiment in which investigators randomly allocate eligible people into groups to

receive or not to receive one or more interventions that are being compared. The results are assessed by comparing outcomes in the different groups. Through randomisation, the groups should be similar in all aspects apart from the treatment they receive during the study.

Recurrent depression: The development of a depressive disorder in a person who has previously suffered from depression.

Relapse: The reappearance of disease signs and symptoms after apparent recovery. The definitions of relapse used in the review in the guideline were those adopted by the individual studies and varied between studies.

Relative risk (RR) (also known as risk ratio): The ratio of risk in the intervention group to the risk in the control group. The risk (proportion, probability or rate) is the ratio of people with an event in a group to the total in the group. An RR of 1 indicates no difference between comparison groups. For undesirable outcomes, an RR that is less than 1 indicates that the intervention was effective in reducing the risk of that outcome.

Relaxation therapy: Relaxation therapy uses a variety of physical and mental techniques (for example, tensing and relaxing different muscle groups in turn, imagining peaceful scenes, and so on) to help patients to reduce bodily and psychological tension in a systematic way which they can practice at home and use when under stress. It can be used as a component of a treatment package (e.g. behaviour therapy) or as a therapy in its own right.

Remission: Diminution or disappearance of symptoms.

Risk profiling: A structured assessment and analysis of those factors in the child/young person's environment and history that are known to increase the risk of depression.

Screening: Screening is defined grouping this guideline as a simple test performed on a large number of people to identify those who have depression.

Selective serotonin reuptake inhibitors (SSRIs): A class of antidepressant medications that increase the level of serotonin (a neurotransmitter believed to influence mood) in the brain.

Self-help: Any activity or lifestyle choice that an individual makes in the belief that it will confer therapeutic benefit.

Severe depression: The guideline uses the ICD-10 definition of 7 or more depressive symptoms.

Sleep hygiene: Behavioural practices that promote continuous and effective sleep.

Standard care: The usual care given to those suffering from acute psychiatric episodes in the area concerned.

Statistical significance: An effect size that is statistically significant is one where the probability of achieving the result by chance is less than 5% (that is, a *p*-value less than 0.05.

Stepped care: A considered, organised, co-ordinated approach to screening, assessment, treatment and onward referral by an individual practitioner, team or care provider organisation, within the parameters of defined protocols or pathways. These approaches may or may not be provided within the context of a fixed budget (for example, the Health Maintenance Organisation [HMO] in the USA). Primary care trusts are required to develop protocols for the treatment of depression in primary care within the National Service Framework for Mental Health.

Stepped care model: A sequence of intervention options to offer simpler and less expensive interventions first and more complex and expensive interventions if the patient has not benefited, based on locally agreed protocols.

Subsyndromal depression (also termed subthreshold depression): Depression symptoms that fail to meet criteria for major depressive disorder.

Suicidal ideation: Thoughts about suicide or of taking action to end one's own life.

Tier 1: Primary care services including GPs, paediatricians, health visitors, school nurses, social workers, teachers, juvenile justice workers, voluntary agencies and social services.

Tier 2 CAMHS: Services provided by professionals relating to workers in primary care including clinical child psychologists, paediatricians with specialist training in mental health, educational psychologists, child and adolescent psychiatrists, child and adolescent psychotherapists, counsellors, community nurses/nurse specialists and family therapists.

Tier 3 CAMHS: Specialised services for more severe, complex or persistent disorders including child and adolescent psychiatrists, clinical child psychologists, nurses (community or inpatient), child and adolescent psychotherapists, occupational therapists, speech and language therapists, art, music and dramatherapists , family therapists.

Tier 4 CAMHS: Tertiary level services such as day units, highly specialised outpatient teams and inpatient units.

Tricyclic antidepressants: The original class of antidepressants used to treat depression by increasing levels of the neurotransmitters serotonin and norepinephrine.

Waitlist control: A term used in controlled trials when participants are allocated to a 'waitlist' condition. Outcome measures are taken from these participants at the end of the waiting period and compared with those from participants who received the treatment. The waitlist participants then receive the treatment.

Watchful waiting: An intervention in which no active treatment is offered to the child or young person with depression if in the opinion of the healthcare professional the person may recover without a specific intervention. All such patients should be offered a follow-up appointment.

Young person: An individual aged 12 years to their 18th birthday.