

Evidence
Based Practices for

Depression in
Children and Adolescents

CHILDREN'S MENTAL HEALTH ONTARIO

SECTION 2

Children and Adolescents with Depressive Disorder:

Findings

from the Literature and Clinical Consultation in Ontario

Children and Adolescents with Depressive Disorder: Findings from the Literature and Clinical Consultation in Ontario

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1. INTRODUCTION

Depressive disorders in children and adolescents are among the most common and more disabling mental health problems (Fleming and Offord, 1990).

Depression is a major factor in adolescent suicide, substance abuse, and a common cause of school failure and school dropout. Children and adolescents with major depressive disorders are at risk for suicidal behaviour, substance abuse, physical illness, early pregnancy, poor academic performance, impaired psychosocial functioning, and exposure to negative life events (Kovacs, 1996).

Although there are similarities, depression in children may manifest itself differently than depression in adults (Fritz, 1997). Many questions remain about the course and outcome of depression in children and adolescents. Only recently has research on juvenile depression emphasized standardized clinical assessment, clear diagnostic criteria, and rigorous methods. Clearly, much more research about childhood depression is needed.

2. METHODOLOGY

This paper aims to draw together current research for the treatment of serious depression in children and adolescents based on both empirical evidence and systematic clinical experience. This information is directed towards child and adolescent mental health professionals in Ontario and is not intended to be prescriptive, but rather to present clinicians with a broad template to guide their practice.

The overall Project was guided by a Steering Committee of highly-experienced Executive Directors and clinicians from Children's Mental Health Ontario's member centres. The research process began with a series of computer-assisted and hand searches of databases, journals, and published and unpublished reports from Ontario and other jurisdictions to identify information about depression in children and adolescents based on both empirical research and systematic clinical evidence. This strategy was adopted to address the known disparity between clinical practice and efficacy studies (Seligman, 1995).

Then the Draft Findings were presented for validation and feedback to a Panel of Experts in child and adolescent depression. Individual interviews also were

conducted with experts in the field. Next the Draft Findings were shared with children's mental health professionals in a series of Regional Focus Groups. Participants in the Regional Focus Groups validated the data, identified gaps requiring additional research, made recommendations for changes, and identified children's mental health centres in Ontario that were implementing the specific types of evidence-based programs reported in the Draft Findings. Then the Draft Findings were revised and presented to the Steering Committee for final approval. To facilitate the transfer of knowledge, the information in the Findings guided the development of a number of tools that could be used by children's mental health professionals in the assessment and treatment of child and adolescent depression.

3. EPIDEMIOLOGY

Depressive disorders occur among 2% to 4% of children and 4% to 8% of adolescents. In terms of gender differences, the prevalence of depression is virtually the same for girls and boys during childhood, but the prevalence for girls doubles during adolescence (Fleming and Offord, 1990). Adolescent girls appear to have more risk factors for depression than boys, such as an earlier onset of puberty, introspective styles of problem-solving, concerns about body image, higher risk of sexual abuse, and pressure to conform to a more limited range of social roles (Nolen-Hoeksema & Girgus, 1994). Depressed adolescent boys are more likely to exhibit parasuicidal behaviour (e.g., risk-taking, substance abuse). A cross-national study of the trends for major depression has showed overall trends to higher rates of depression and to earlier ages of onset of depression worldwide (JAMA, 1992).

Few studies have included samples of children and adolescents diverse enough to test the questions about differences in depression rates in ethnic and other specific populations. Psychosocial stresses are believed to increase the risk of depression in children and youth from war-torn countries and those who are recent immigrants, gay/lesbian, and from aboriginal families. There are strong associations between childhood depression and indicators of adversity (e.g., poverty, homelessness, chronic stress, family disruption, reduced opportunities), primarily through research examining various life-stress models (Gotlib & Hammen, 1992; Reinherz and others, 1989). Social supports, interpersonal skills, consistent relationship with an adult, staying in school and other protective factors may reduce the negative effects of adverse circumstances (Hammen, 1991), but generally there is little empirical research on this topic for depressed children (Harter and others, 1992).

3.1 Characteristics of Child and Adolescent Depression

The characteristics of childhood depression vary across developmental stages and diverse ethnic groups, but they are generally similar to the symptoms of adult depressive disorder. The clinical picture of depression contains features associated with mood changes that are unique to the disorder (e.g., sadness, dysphoria, worthlessness, suicidal ideation). The older the child, then the more similar the symptoms are to those of depressed adults. Unlike adults, however, younger children are less likely to make serious suicide attempts, but they are more likely to demonstrate more symptoms of:

- Depressed appearance
- Anxiety (e.g., separation anxiety)
- Irritability and frustration, accompanied by tantrums and behavioural problems
- Apathy and disinterest
- Lack of cooperation
- Withdrawal from family and friends
- Physical complaints (e.g., headache and stomachache)
- Auditory "hallucinations"

Depression in childhood appears to be different than depression in adolescence. In contrast to younger children, adolescents are more likely to show symptoms of:

- Sleep and appetite disturbances
- Weight loss/gain
- Refusing to attend school or poor school performance
- Delusions
- Suicidal thoughts and feelings
- Suicide attempts

Major depression in children and adolescents is usually an episodic disorder with each episode lasting an average of 8 months. More than 90% of the children and adolescents recover from an episode within 1 to 2 years (Emslie and others, 1997a), whereas the remaining 10% suffer from chronic depression following their first episode. Within two months of recovery, however, about half of the children and adolescents experience a relapse. Over a period of 3 to 5 years, between one-half and three-quarters suffer a recurrence of depression, with similar rates for inpatients and outpatients (Kovacs, 1996).

3.2 Comorbidity

The National Comorbidity Survey study indicates that major depression in childhood rarely occurs in pure forms -- high rates of comorbidity are the rule and not the exception (Angold and Costello, 1993; Blazer and others, 1994). Most children and adolescents suffering from depression also have two or more other disorders (Goodyer and others, 1997). In general, comorbid disorders tend to precede the onset of major depression by at least one year, with the exception of psychosis in children, which tends to follow a major depression.

Anxiety disorder the most common comorbid disorder and it is present in about one-third of the children and adolescents with serious depression (Angold and Costello, 1993). The type of anxiety disorder tends to vary with the age of the child. In younger children separation anxiety appears more frequently, whereas in adolescents generalized anxiety disorder is more common.

Nearly one-third of depressed children and adolescents also suffer from comorbid dysthymia (depressed or irritable mood for at least one year). This is often called "double depression" and it is associated with poor treatment outcomes. Since double depression often predicts recurrent mood disorder, it is important to monitor children and adolescents with double depression closely after their initial treatment and to provide ongoing treatment as needed.

Conduct disorder is the next most frequent comorbid disorder and it appears in 15% to 30% of depressed children and adolescents. Conduct disorder may develop together with the depression and continue after remission of the depression (Kovacs, 1996). Unlike a child with conduct disorder alone, a depressed child with comorbid conduct disorder also shows the symptoms of depression and episodic patterns characteristic of depression.

Between 10% and 30% of depressed children have comorbid obsessive-compulsive disorder. In these cases, the depression is usually treated first and then the obsessive-compulsive disorder.

3.3 Parental Depression

The literature indicates that parental depression is often associated with child depression. The presence of depression in parents should alert clinicians that their children may also be at risk of developing depression. This is especially important because the majority of the episodes of depression in children with an affective disorder are neither recognized nor treated (Beardslee and others, 1998). Numerous studies have reported increased rates of psychiatric disorders in children from homes with parents who have an affective disorder. About 60%

of the children of parents with a major depressive disorder will develop a psychiatric disorder during childhood or adolescence and they are four times more likely to develop an affective disorder (Lavoie & Hodgins, 1994). Life table estimates indicate that by age 20 a child with a parent who has an affective disorder has a 40% chance of experiencing an episode of major depression, and by the age 25 this rate increases to 60% (Beardslee and others, 1993). In general, the younger the age at onset of parental depression, the greater the risk for psychiatric problems in their children.

As a corollary, if a child presents with serious depression, it is important to verify whether the parent is depressed and requires treatment. If untreated, depression may affect the development of normal parent-child attachment and social, emotional, cognitive and interpersonal skills.

Early identification of mild depression and early intervention may reduce the risk of developing or having recurrences of depression. Depressed parents often are not aware that their child is depressed or suicidal. Since depressed parents often appear in hospital emergency rooms, it is important that hospitals and physicians link with children mental health professionals to check the status of the children. Likewise, the teachers and parents alike should be made aware that the depression in children presenting with learning problems often is missed.

4. ASSESSMENT

Thorough assessment necessary for serious depression. It is essential that the assessment of children take into account functioning relative to that expected of the child's developmental stage and social context (family, school, peers, community). To obtain this information, the following types of interviews are recommended when depression is suspected:

- Separate and/or conjoint interviews with child and his/her parents
- Multiple interviews over time, especially with adolescents
- Multiple perspectives through interviews with collateral informants, including teachers, primary care physicians, and social service professionals

With pre-teenage children, first the parent(s) should be interviewed alone (or the entire family together), and then child should be interviewed alone. Interviews with parents need to be sensitive to language and cultural difference and interpreters should be used if necessary.

With teens, it is better to interview the teen alone first or, if two clinicians are available, to interview the teen alone and the parent(s) alone at the same time. If the teen is over 16 years of age, the teen is usually interviewed alone.

Clinicians should be aware that depressed children and adolescents may be uncooperative, withdrawn, irritable or have difficulty expressing their feelings. It may take time to build trust over several interviews before sensitive topics can be discussed. Depressed children and adolescents may mask the underlying depression by appearing irritable, bored, fighting with school mates or peers, or express their feelings by self-injurious behaviour.

Since childhood and adolescent depression may be episodic, the nature and the timing of assessments greatly affect the end result. Frequent monitoring of the number of episodes of depression in the period between assessments is needed to give a more accurate picture of the developmental processes of the depression, indicate rates of recurrence, and detect comorbid disorders.

4.1 Interview Topics

After a thorough functional assessment (e.g., cognition, affect), interview topics should include:

- Child's developmental history (cognitive, social, other developmental problems and temperament)
- Child's medical and medications history
- Child's psychiatric history
- Parent/family psychiatric history
- Family functioning (especially divorce, marital conflict)
- Child's peer relationships (especially friendships and social skills)
- Child's and family's social supports
- Child's strengths and achievements
- Early and recent negative life events
- Psychosocial and academic problems (including bullying, social withdrawal, avoiding school)
- Neglect of the child or sibs
- Physical, sexual and psychological abuse
- Harassment by peers
- Substance use/abuse (including nicotine)
- Specific questions about DSM-IV-TR target symptoms (see Section 4.3)
- Suicidal ideation and behaviour
- Impulsive, risk-taking, or behaviour causing self-injury
- Changes in eating, sleeping, and activity levels
- Somatic complaints (e.g., headaches and stomachaches), particularly for younger children

With consent, collateral information from school settings may be obtained from teachers and from school-based child and youth workers. From community settings, collateral information may be obtained from children's mental health staff who operate recreation centre programs, weekend programs or summer programs, as well as from trained staff in community centres and parks and recreation programs.

4.2 Making a Diagnosis of Major Depressive Disorder

A diagnosis of major depressive disorder is made when DSM-IV-TR (APA, 2000) target symptoms are present or reported in the history, and other disorders have been eliminated (see Section 4.3 for the target symptoms). Clinicians should be aware that DSM defines Major Depressive Disorder (MDD) during childhood and adolescence according to the same criteria as during adulthood, with the exception that DSM allows irritable mood to substitute for depressed mood. Although children and adolescents who meet the criteria for MDD can be identified reliably (Lewinsohn and others, 1993), these criteria may not be sensitive to developmental differences in the manifestation of depressive problems. Currently, research is underway to improve assessment and taxonomy in developmental psychopathology through greater integration between rationally derived diagnostic categories, such as used in the DSM, with empirically derived quantitative measures of symptoms and syndromes, such as found in the Child Behavior Checklist and related measures (Jensen and others, 1996).

4.3 DSM-IV Criteria

The DSM-IV-TR criteria for the diagnosis of major depressive disorder are:

- 1) At least two weeks of pervasive change in mood shown by depressed or irritable mood and/or loss of interest and pleasure
- 2) These mood changes are accompanied by other characteristics, including significant changes in patterns of appetite, weight, sleep, activity, concentration, energy level, self-esteem, and motivation.

Although they are not included in DSM-IV criteria, the appearance of somatic symptoms (headache and stomachache) and changes in peer relations (social withdrawal) also may accompany mood changes in children and teens.

- 3) Symptoms must show a change from previous functioning
- 4) Symptoms must produce impairment in relationships or in performance of activities

- 5) Symptoms must not be related only to substance abuse, medications, bereavement, other psychiatric illness, or medical illness

4.4 Specific Subtypes of Serious Depression

It is important to assess for specific symptom clusters of depression, since these subtypes require different treatment strategies. These symptom clusters include:

- **Seasonal Affective Disorder.** Symptoms of seasonal affective disorder (SAD) in children are similar to those of atypical depression, except that SAD does not include increased reactivity to rejection and it is seasonal. SAD needs to be distinguished from depression related to school stress, because both forms of depression occur during the same times of year. Research indicates that bright light therapy (10,000 lux lightbox for 30-60 minutes each morning) can significantly reduce SAD in children and adolescents, although it may induce mania in some children.
- **Psychotic Depression.** Psychotic depression adds mood congruent hallucinations and/or delusions to symptoms of severe depression, which distinguishes psychotic depression from schizophrenia. The presence of any psychotic features indicates a more serious depression. Although adults may have auditory hallucinations or delusions, younger children have primarily auditory hallucinations but are not likely to suffer from full blown delusions. Although these may be pseudo-hallucinations, they should be taken seriously. The maturity of the central nervous system is hypothesized to account for these differences between children and adults. For appropriate treatment, symptoms of psychotic depression should be distinguished from bipolar disorder, substance abuse, dissociative states, and trauma-related hallucinations.
- **Bipolar Depression.** This form of depression appears similar to unipolar depression, but is characterized by one or more manic episodes. About 20% of children and adolescents who initially show serious depression will "switch" to manic or mixed (manic-depressive) episodes. If the child or adolescent is receiving medication for depression, it may be necessary to stop the antidepressant and begin a mood stabilizer, such as lithium. The child is at risk of developing bipolar disorder if symptoms such as psychosis, psychomotor retardation, pharmacologically induced hypomania, and family history of bipolar disorder are present. Adolescents are more likely to have rapid cycling or mixed episodes, which are difficult to treat and increase the risk for suicide.

It is also important to rule out bipolar II disorder, which is often missed or misdiagnosed (Geller & Luby, 1997). Bipolar II disorder is characterized by recurrent major depressive episodes accompanied by one or more hypomanic episodes.

- **Atypical depression.** This form of depression usually begins during adolescence and it affects girls more often than boys. It is "atypical" because the clinical picture does not fit the usual criteria for serious depression but the depressive episodes do not fit the criteria for other depressive disorders (such as dysthymia) either. Symptoms for adolescents include mood reactivity during the depressive episode, plus at least one of the following associated features: increased reactivity to rejection, lethargy, increased appetite and/or craving for carbohydrates, weight gain, and sleeping excessively (Stewart and others, 1993). There is little evidence-based knowledge about treating atypical depression in adolescents. Adults have been found to respond to monoamine oxidase inhibitors (MAOIs). A recent controlled trial with adults has indicated that cognitive therapy may offer an effective alternative to standard acute-phase treatment with MAOIs for individuals with major depressive disorder and atypical features (Jarrett, 1999).

5. DIFFERENTIAL DIAGNOSIS

Several disorders may imitate depression or occur at the same time. The diagnosis of major depressive disorder is made if the child meets the DSM-IV-TR criteria and if the symptoms of depression cannot be attributed solely to other physical or psychological conditions.

Common medical conditions that mimic depression are anemia, hypothyroidism, and infectious mononucleosis. A physical exam may be needed to rule out these conditions as well as to check somatic complaints (e.g., headaches) or concerns about a child's overall health (e.g., low weight, failure to thrive). Children with non-mood disorders such as anxiety disorders, learning disabilities, or disruptive disorders may show lack of concentration, irritability and low self-esteem. If there is a concern about disabilities, then assessment of intelligence, hearing, speech and language, and academic functioning may be required.

Children with anxiety disorders may have symptoms similar to depression, including insomnia, changes in appetite, diminished concentration, and sometimes suicidal thoughts. Children with separation anxiety often are unhappy (dysphoric) when separated from their parents, but the situation changes when they are reunited.

Youth with substance abuse disorders often show disturbances of mood, but these diminish after detoxification. Differential diagnosis requires a careful examination of alcohol and drug use (including tobacco) since they can cause depression, be comorbid with depression, or result from depression.

It is important to distinguish between personality disorders and depression because some of the symptoms of personality disorder may be secondary to mood disorder (Lewinsohn and others, 1997; Marton and others, 1989).

Manic and depressive symptoms may be mixed in bipolar disorder. Approximately 20% of children who have an initial depressive episode will manifest a bipolar disorder later. Hypomanic symptoms may be brief at the onset of bipolar disorder. Comorbid symptoms of ADHD, anxiety, posttraumatic stress disorder, substance abuse, and sleep disorders require careful assessment. Likewise, clinicians should monitor for signs of bipolar disorder if there is a family history of psychosis, bipolar or cyclothymic (mood-swing) disorders.

6. TREATMENT

There is relatively little evidence-based research on the treatment of depression in children. Since most of the treatment recommendations are based on clinical experience or research in adults, care should be taken when applying the results to children. Determining a treatment approach depends largely on deciding what blocks to development need to be addressed, in what order, and which systems are most amenable to change at a given time (Korenblum, 1998).

Selection of treatment setting depends on the severity of the disorder, motivation of the child/youth and/or family towards treatment, the severity of comorbid conditions (e.g., substance abuse), and the availability of a safe environment.

The choice of treatment interventions should be guided by factors that include the number of prior episodes, duration of the disorder, subtype of depression (e.g., psychotic, bipolar, atypical), age, contextual issues (e.g., family conflict), treatment setting, and available options (e.g., in the north, inpatient admission may not be an option).

Research indicates that treatment for depression may be discussed in terms of four phases:

- Phase 1: Preparation for Treatment
- Phase 2: Acute Treatment Phase
- Phase 3: Continuation Treatment Phase
- Phase 4: Maintenance Treatment Phase

Phase 1: Preparation for Treatment

Preparation for treatment is vitally important. Preparation includes forming a therapeutic alliance early in treatment to maintain child and family involvement over the course of treatment. The therapeutic alliance process is facilitated by psychoeducation -- the education of the parents, child, other family members, and teachers about the disorder and its treatment (Brent and others, 1993; Fristad and others, 1996).

Psychoeducation drastically reduces treatment dropout. It allows treatment to proceed with less blame of the child or self-blame on the part of parents or caregivers. For example, an evaluation of a brief (2-hour) psychoeducational session for the parents of depressed adolescents found that participants showed improvement in knowledge about depression and in modification of dysfunctional beliefs about depression and its treatment (Brent and others, 1993).

All family members should be offered psychoeducation since the symptoms of depression usually affect each of them, often producing more guilt and stress for the child. It has been well established that family environmental factors (e.g., family conflict, negative affective style) can profoundly influence the course of major affective illness (Keitner and Miller, 1990). With family psychoeducation, supportive and understanding relationships can improve the child and family's overall functioning and treatment outcomes (Asarnow and others, 1993, 1994).

Likewise, teachers should receive psychoeducation to learn how depression can affect the child's peer relationships and academic performance and the steps that teachers may take to support the treatment plan.

Topics for psychoeducation usually include the following:

- Signs and symptoms of depression
- Reasons for childhood depression
- Course of the disorder, relapse and recurrence
- Impact on peer and family relationships
- Impact on school attendance and academic functioning
- Treatment options
- Role of psychiatric medication
- Common misconceptions about medications
- Strategies that may be used by parents and teachers to assist the treatment process

One alternative to psychoeducational sessions is to encourage parents and others involved with the child to read a book, such as "Lonely, Sad, and Angry: A Parent's Guide to Depression in Children and Adolescents" (Ingersoll and Goldstein, 1996), that provides accurate and current information about childhood depression. Another option is to view a video, such as "The Other Side of Blue: The Truth About Teenage Depression" (Dubo and Korenblum, 2000).

Phase 2: Acute Treatment Phase

There is a wide range of views about which therapies or components of therapies are effective during the acute phase of child and adolescent depression (Jacobson and others, 1996). In clinically referred samples, the median duration for a major depressive episode in children is about 8 months, with a recovery rate of up to 90% over 1 to 2 years from the onset and a rate of recurrence of 40% to 70% over a period of 2 to 5 years, respectively (Birmaher, 1996; Kovacs, 1996).

The effectiveness of therapy is influenced by age at the time of the first episodes of depression, severity of depression, presence of other disorders, access to supports, presence of parental disorders, family conflict, exposure to stressful life events, socioeconomic status, quality of treatment, and motivation. A combination of treatment elements from psychiatric medication (pharmacotherapy), psychodynamic therapy, interpersonal therapy (IPT), cognitive-behavioural therapy (CBT), and family therapy appear to be most effective in the acute phase of the disorder (Birmaher and others, 1996).

6.1 Pharmacotherapy

Medication alone is rarely indicated for treating serious depression in children and youth. Given the developmental and psychosocial context of child and adolescent depression, treatment with medication alone is not sufficient. The high degree of comorbidity and the severity of academic and social consequences of depression suggests a multimodal treatment approach, such as combining drug treatment with psychoeducation and psychotherapeutic treatment (Kutcher, 1997).

Overall, there have been very few studies on the use of medications for children and adolescents with depression or pharmacokinetic and dose-range studies with children. The limited research evidence indicates that antidepressant medications, however, may be useful for treating children and adolescents with certain forms of serious depression that impedes psychological treatment or where the child or adolescent does not respond to psychotherapy. If there is a strong family history of depression and a family history of positive response to a particular medication, pharmacotherapy may be indicated for children and

adolescents with non-rapid-cycling bipolar depression, psychotic depression, depression with severe symptoms that prevent effective psychotherapy, and depression that fails to respond to psychotherapy.

A major concern is the practice of prescribing combinations of medications ("drug cocktails") without sufficient evidence for their efficacy. Another questionable practice is prescribing medication for childhood depression without sufficient monitoring or professional support from an experienced child psychiatrist. In some communities in Ontario, a knowledgeable child psychiatrist provides a consultation "help line" for family physicians and children's mental health professionals. A third concern is the need to review all potential drug side effects and toxicity with each child as part of the informed consent provisions of Ontario's new Consent to Treatment Act, which has no lower age limit -- all children appear to be considered competent. As part of the informed consent process, an ethical safeguard to ensure that the child's needs are paramount is to clarify the meaning taking medication has to the child and parent -- children may see medication as poison, punishment for being bad, a sign of weakness, an instrument of control, or way of identification with a mentally ill parent.

Generally speaking, the choice of medication is determined by the symptom and comorbidity profile of the child and adolescent. Initial doses of drugs tend to be lower than those used for adults and they are gradually raised to the target dose. Drug combinations ("drug cocktails") should be used for children and adolescents only in rare circumstances and under close supervision. During the first month, there should be a regular review of the symptoms and side-effects with the child and parents. At eight to twelve weeks there should be a comprehensive evaluation with the child and parents of the symptoms and overall functioning. If improvement is seen, then the medication is usually continued until at least six months after the remission of depression. If improvement is not attained, then alternative therapies or medication should be considered. To avoid withdrawal problems and sudden relapse, antidepressants should be discontinued gradually over a six week period in a supervised and planned manner.

Selective Serotonin Reuptake Inhibitors. Selective serotonin reuptake inhibitors (SSRIs) are favoured as the first-choice of antidepressant medication, since they have a relatively safe side-effect profile, very low lethality after overdose, and they are easy to use (DeVane and Sallee, 1996; Leonard and others, 1997). Studies report SSRIs are efficacious for the treatment of youth with major depressive disorders (Emslie and others, 1997b). Research indicates a 70% to 90% response to SSRIs for the treatment of adolescents with major depression (DeVane and Sallee, 1996; Leonard and others, 1997). It is important to monitor drug interactions, however, since there is a danger of "serotonin syndrome" (agitation, nausea, dizziness) in some children and with certain drug

combinations. Although SSRIs appear safe for short periods of treatment, additional research is needed to determine their efficacy and long-term effects in children and adolescents (Ryan & Varma, 1998).

Consensus guidelines for medication treatment algorithms based on clinical evidence emphasize the use of SSRIs for treating childhood major depressive disorders (Hughes and others, 1999). The consensus guidelines provide systematic strategies for treatment intervention and recommended tactics for implementation of the strategies, including medication augmentation and medication combinations.

Tricyclic Antidepressants. Given the lack of efficacy and potential side effects, tricyclic antidepressants (TCAs) are no longer seen as the first choice for youth with depressive disorders, although they may be useful for individual cases. A meta-analysis of 12 randomized controlled trials that compared the efficacy of TCAs with placebo in depressed children aged 6-18 years indicated no significant benefit of treatment (Hazell and others, 1995). The therapeutic role of TCAs for children and adolescents needs to be weighed against the lethality of overdose, possible sudden unexplained death, and the availability of safer medications that are easier to monitor (Geller and others, 1999).

6.2 Interpersonal Therapy

Several open clinical and control studies indicate that interpersonal therapy (IPT) is effective for the treatment of acutely depressed adolescents (Mufson, Weissman and others, 1999; Mufson & Fairbanks, 1996). Interpersonal therapy for adolescents is a form of brief adult therapy adapted for depressed youth (Mufson and others, 1993). It is based on research that indicates a strong relationship between interpersonal problems and depression. Interpersonal therapy is a way to address issues of grief, interpersonal roles, role transitions, and interpersonal difficulties. For children and adolescents who have been physically abused, research indicates that interpersonal interventions can be used to combat depression by strengthening social competence (Flisher and others, 1996).

6.3 Cognitive-Behavioural Therapy

Cognitive-behavioural therapy (CBT) for depression is based on the premise derived from cognitive theory that depressed children have distorted views of themselves and their environment which contribute to their depression and can be modified. CBT is typically given for 8 to 10 weekly sessions and parents may be involved at the end of each session and in some cases as co-therapists. Themes addressed in CBT sessions include distinguishing different emotions

and link them to precipitating events, self-monitoring thoughts and feelings, self-rewarding positive behaviours, strengthening social skills, problem-solving, and modifying thinking patterns. The application of CBT is flexible and it may be used individually or with groups (Lewinsohn & Clark, 1999).

Although CBT has received much research attention, the results of the evaluations of CBT in depressed children and adolescents have been difficult to interpret. A recent meta-analysis of six randomized trials that compared CBT with nontherapeutic interventions for depressed children and adolescents (8 to 19 years old) found CBT effective for mild-to-moderate depression (Harrington and others, 1998). The researchers, however, could not recommend CBT without other therapies for severe depression in children and adolescents.

Research on the efficacy of CBT in nonclinical samples has shown CBT to be better than no intervention in reducing depressive symptoms and improving self-esteem in children and adolescents (Reinecke and others, 1998). Studies of CBT with clinical samples generally have found CBT to be better than relaxation training, family therapy, and supportive therapy, but that relapse rates were high (Brent and others, 1997; Vostanis and others, 1996). A recent randomized trial of the impact of CBT, nondirective supportive therapy, and systemic family therapy on adolescents with a major depressive disorder found no differences in the long-term effectiveness of the three therapies (Birmaher and others, 2000). Most participants (80%) recovered within 8 months and 30% had a recurrence 4 months from recovery. Approximately one-fifth of participants had persistent depression over the two-year follow up period, although they had received the initial 12 to 16 weeks of psychotherapy and continuous treatment afterwards with psychotherapy and/or pharmacotherapy. The severity of self-reported and interviewer-rated depression at intake and self-reported parent-child conflict predicted lack of recovery, chronic depression, and recurrence. The presence of these symptoms at intake and at the end of acute therapy may alert the therapist to the need for longer-term intervention. These interventions may include addressing family discord, combining psychotherapy and pharmacotherapy, and using more aggressive somatic therapies (Birmaher and others, 1996).

At his point in time, evidence indicates that CBT appears to benefit children and adolescents with mild and moderate levels of depression, but the efficacy of CBT alone for severe depression is uncertain. If CBT is used, it is recommended that treatment be continued beyond the acute phase of depression.

6.4 Psychodynamic Therapy

Therapist reports indicate that psychodynamic principles are useful for the treatment of children and adolescents, especially those with mild and moderate

levels of depression. Psychodynamic approaches are used to help youth understand themselves, identify feelings, improve self-esteem, change maladaptive patterns of behaviour, interact more effectively with others, and cope with ongoing and past conflicts (Bemporad, 1994). Although the effectiveness of psychodynamic therapy for treating depressed children and adolescents has not been systematically evaluated in controlled studies, clinical experience indicates that the psychodynamic principles are an important component of treatment, particularly when integrated with structured forms of therapy (e.g., interpersonal, cognitive-behavioural).

6.5 Family Therapy

There is a strong relationship between family factors and depression in children (Kovacs;1997). Depression in parents and family members, family history of psychiatric illness, substance abuse, marital discord, parent-child conflict, parental abuse and neglect, and stressful or chaotic family environments have been linked to childhood depression. There is little evidence, however, that parent counselling and family therapy alone are effective in treating child and adolescent depression. With younger children, clinicians tend to work with both child and parents in treatment. Parents may be used as co-therapists depending on the individual case using structured approaches such as CBT. Home-based interventions may work with the family to develop a supportive home environment or to reduce the stress at home. Social work intervention may be helpful in dealing with issues related to poverty and psychosocial stress (e.g., unemployment, homelessness, access to social supports).

6.6 Integrative Approaches

There also is an emerging recognition that children and adolescents benefit from an integration of components found in psychodynamic therapy, interpersonal therapy, cognitive-behavioural therapy and family therapy. Taking an integrative approach, the major principles of effective therapy for childhood depression include:

- Identifying cognitive distortions about self, the world and future
- Learning strategies to alter these cognitive distortions
- Identifying feelings and problem areas of grief
- Improving self-esteem
- Changing maladaptive patterns of behaviour
- Learning to interact more effectively with others
- Adopting strategies for coping with past and ongoing conflicts and personal difficulties

Stark and his colleagues (1996) offer an example of integrative treatment program for depressed children. This program includes individual child and parent therapy, as well as family and school interventions. Cognitive and behavioural methods are used to assist the child and parents to address the child's mood and social skills problems. The program also covers parents' discipline, marital conflict, interpersonal negotiation, individual and family problem solving and communications. Parental involvement is an important component, since parental depression and other mental health problems as well as marital difficulties and parent-child conflict are known to contribute to childhood depression. However, Brent and colleagues (1997) found that many families of depressed children refuse family involvement or offers to provide depressed parents with therapy.

Individual treatment is another feature of the integrative approach. Whereas most existing therapies provide children with cognitive, problem-solving and social skills exercises that are delivered in a group format, research indicates that these may be a poor fit with a depressed child's level of functioning, skill deficits, and cognitive patterns, especially in the early stages of the treatment process (Stark and others, 1996). Furthermore, individualized programs better address the unique symptom-behaviour profile presented by comorbidity.

Since they focus on multiple components, integrative treatment programs can take a considerable amount of time (30 sessions on average) and they can cost more than briefer interventions with depressed children and adolescents.

Phase 3: Continuation Treatment Phase

Given the high rates of relapse and recurrence of depression, once treatment outcomes have been attained, therapy usually should be continued for at least 6 to 12 months and may be needed periodically to prevent recurrence (see Section 5.4 for a discussion). Monthly "booster sessions" have been found useful either in preventing relapses of depression in adolescents (Kroll and others, 1996) or in accelerating the recovery of those who were still depressed at the end of the acute phase (Clarke and others, 1999). If antidepressant medication is prescribed, it should be continued at the same dose as used in the acute treatment phase unless there are significant side effects or dose related negative effects.

Studies have consistently found that the severity of self-reported depression at intake, the presence of disruptive disorders, and family problems predict the need for additional treatment. In a recent study, Brent and his colleagues (1999) report that slightly more than half of the participants in a clinical trial for

adolescent depression received other forms of treatment in addition to the acute phase treatment. Treatment included one or more of the following: medication (SSRIs), treatment for comorbid behavioural problems, and services to deal with family difficulties. The median number of additional treatment sessions was 6 and they began within 3 months after the end of acute treatment. It is important that therapists focus on the entire depressive episode, rather than just the acute phase, to prevent relapse.

During the continuation phase various psychosocial interventions can be used to help children/youth achieve the following:

- consolidate skills already learned
- cope with the social and psychological effects of depression
- effectively respond to environmental stressors
- understand inner conflicts that may trigger a depressive relapse.

Phase 4: Maintenance Treatment Phase

Children and adolescents with multiple or severe episodes of depression and those with a high risk for recurrence may need ongoing therapy to prevent relapse. The main goal of the maintenance phase is foster healthy growth and development and to prevent relapse or recurrence. This phase usually extends from one year onwards and includes monthly or quarterly sessions, depending on the severity of illness and availability of social supports. Children and adolescents who have suffered from two or more episodes of depression may require long-term maintenance drug therapy, especially if they have comorbid dysthymia ("double depression") and ongoing functional impairment. Longer treatment may be needed for children and youth experiencing comorbid psychosis, suicidal ideation or behaviour, severe functional impairment, and more than three episodes of depression.

In the absence of published studies regarding the maintenance treatment of children and youth, the following guidelines are drawn from studies of depressed adults (Depression Guideline Panel, 1993).

- Youth with a single episode of depression without comorbid disorders, mild episodes, or a long break between episodes (e.g., 5 years) require monitoring but probably do not require ongoing therapy.
- Youth with three or more episodes of depression, especially when they occur within a short period of time, should receive ongoing therapy for at least 1 to 3 years or active monitoring with rapid access to therapy, if needed.

- Youth with two episodes who also have a family history of bipolar disorder or recurrent depression, onset of the first depressive episode as before age 20, and severe or life-threatening episodes that took place during the past three years also should receive ongoing therapy for at least 1 to 3 years or active monitoring with rapid access to therapy, if needed.
- Youth with more than three episodes or with second episodes accompanied by psychosis, severe impairment, severe suicidal thoughts/behaviours, and treatment resistance, should be considered for longer treatment.
- Children and youth who are maintained only on medications should also be offered psychotherapy to help them cope with the psychosocial consequences of depression, prevent relapse, and reduce the risk or impact of comorbid disorders.
- Family physicians have an important role to play in monitoring children and youth in the maintenance phase.

7. DEPRESSION WITH SUICIDAL THOUGHTS AND BEHAVIOUR

Depression with suicidal thoughts and behaviour is more likely to occur in adolescents rather than younger children. Because of the close link between depression and suicide attempts, as well as completed suicide, depressive symptoms are a target of central importance in treatment. Treatment for youth with suicidal thoughts and behaviour is similar to that for other severely depressed youth, but more attention is given to assessment, monitoring and reduction of suicide risk. As the efficacy of selective serotonin reuptake inhibitors (SSRIs) is becoming clear (Emslie and others, 1995), medication is also becoming an integral part of the treatment of major depressive disorders in youth who have depression with suicidal thoughts and behaviour.

Assessment of suicide risk should be an integral component of any assessment of depression. Assessment of suicide risk considers functional impairment, degree of hopelessness, presence of psychosis, stability of family environment, access to supports, and availability of methods for suicide. Risk factors for suicide include:

- Feelings of hopelessness and isolation
- Family history of suicide or suicide attempts
- Close friend or acquaintance who commits suicide ("contagion effect")
- Recent loss of a friend or loved one

- Shameful event (especially for adolescents)
- Reaction of others to gay/lesbian sexual orientation
- Impulsive behaviour
- Substance abuse
- History of physical or sexual abuse
- Unstable family environment
- Few supports
- Availability of methods for suicide

After assessment, the next step is developing a safety plan in conjunction with the parents, to address safety, supervision, and removing the methods for committing suicide from the home. If parent-child conflict, criticism, and/or family dysfunction are identified in assessment, they should be treated right away to reduce or eliminate factors that often precipitate self-harm in children and adolescents. If an adequate safety plan can be developed, then outpatient treatment is an option. If risk remains high, treatment in a more restrictive setting may be necessary. Signs of high risk include plans for suicide, hopelessness, lack of a reason to continue living, previous suicide attempts (particularly those using active methods, rather than overdoses or cutting), and alcohol or drug abuse (especially for adolescent males).

Inpatient admission can be useful for crisis management, but brief hospitalization and relatively infrequent outpatient sessions aimed at the individual adolescent often are of insufficient impact and intensity to counter long-standing problems of interpersonal functioning with family and peers. The presence and severity of adolescents' depressive symptoms, including suicidal thoughts, at the time of initial hospitalization are the baseline characteristics most strongly related to the treatment outcomes of reduced severity of depression, reduced risk of suicide, and rehospitalization 6 months after hospital discharge (King and others, 1997). In addition to long-term interventions that address family and peer problems, medication management appointments and follow-through "booster" sessions are associated with positive treatment outcomes.

Although clinical judgment is essential to assess each individual situation, some general guidelines are for dealing with suicidal youth include:

- All lethal agents should be removed from the home (especially guns).
- Assessment should include physical and sexual abuse, since it is strongly linked with suicidal behaviour in young persons.

- Assessment should also be made for substance abuse, disruptive and personality disorders, as well as poor parent-child communication, school problems, maltreatment and psychological abuse, and negative life events (e.g., recent death, loss of a loved-one, shameful event, school failure).
- Early treatment should include family therapy and education and other psychosocial interventions (Brent and others, 1997).
- If the youth does not improve from psychotherapy or if the potential to benefit from psychotherapy alone is impaired, and psychotic features are not present, then SSRIs are the antidepressants of choice.
- Tricyclic antidepressants generally should not be prescribed because of risk of death after an overdose. If they are prescribed, they should be dispensed under close supervision.

8. REFERENCES

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)*. Washington, DC: American Psychiatric Association

Angold A & Costello, E (1993). Depressive comorbidity in children and adolescents: empirical, theoretical, and methodological issues. *American Journal of Psychiatry* 150:1779-1791

Asarnow JR, Goldstein MJ, Tompson M, Guthrie D (1993). One-year outcomes of depressive disorders in child psychiatric inpatients: evaluation of the prognostic power of a brief measure of expressed emotion. *J Child Psychol Psychiatry* 34:129-137

Asarnow JR, Tompson M, Hamilton EB, Goldstein MJ, Guthrie D (1994). Family-expressed emotion, childhood-onset depression, and childhood onset schizophrenia spectrum disorders: is expressed emotion a nonspecific correlate of child psychopathology or a specific risk factor for depression? *J Abnorm Child Psychol* 22:129-146

Beardslee WR, Versage EM, & Gladston TRG (1998). Children of affectively ill parents: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 37:1134-1142

Beardslee WR, Keller MB, Lavori, PW and others (1993). The impact of parental affective disorder on depression in offspring: a longitudinal follow-up in a nonreferred sample. *J Am Acad Child Adolesc Psychiatry* 32:723-730

Bemporad JR (1994). Dynamic and interpersonal theories of depression. In *Handbook of Depression in Children and Adolescents*, Reynolds WM, Johnson HF (Eds.), New York: Plenum, pp 81-95

Birmaher B, Brent DA, Kolko, D and others (2000). Clinical outcome after short-term psychotherapy for adolescents with major depressive disorder. *Arch Gen Psychiatry* 57(1):29ff

Birmaher B, Ryan ND, Williamson DE, Brent DA, Kaufman J and others (1996). Childhood and adolescent depression: a review of the past 10 years. Part II. *J Am Acad Child Adolesc Psychiatry* 35:1575-1583

Blazer D, Kessler R, McGonagle K, Swartz M (1994). The prevalence and distribution of major depression in a national community sample: the national comorbidity survey. *Am J Psychiatry* 151:979-986

Brent DA, Kolko D, Birmaher, B. and others (1999). A clinical trial for adolescent depression: predictors of additional treatment in the acute and follow-up phases of the trial. *J Am Acad Child Adolesc Psychiatry* 38:263-272

Brent DA, Holder D, Kolko D and others (1997). A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive treatments. *Arch Gen Psychiatry* 54:877-885

Brent DA, Poling K, McKain B, Baugher M (1993). Psychoeducational program for families of affectively ill children and adolescents. *J Am Acad Child Adolesc Psychiatry* 32:770-774

Clarke GN, Rohde P, Lewinsohn PM, and others (1999). Cognitive-behavioral treatment of adolescent depression: efficacy of acute group treatment and booster sessions. *J Am Acad Child Adolesc Psychiatry* 38:272-280

Depression Guideline Panel (1993). *Depression in Primary Care, Vol I: Treatment of Major Depression. Clinical Practice Guideline*, Rockville, MD: US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research

DeVane CL, Sallee FR (1996). Serotonin selective reuptake inhibitors in child and adolescent psychopharmacology: a review of published experience. *J Clin Psychiatry* 57:55-66

Dubo E & Korenblum M, (2000). *The other side of blue: The truth about teenage depression* Woodstock, ON: The Canadian Learning Company

Emslie GJ, Rush AJ, Weinberg WA and others (1997a). Recurrence of major depressive disorder in hospitalized children and adolescents. *J Am Acad Child Adolesc Psychiatry* 36:785-792

Emslie GJ, Rush AJ, Weinberg WA and others (1997b). A double-blind randomized, placebo-controlled trial of fluoxetine in children and adolescents with depression. *Arch Gen Psychiatry* 54:1031-1037

Fleming, JE & Offord DR (1990). Epidemiology of childhood depressive disorders: a critical review. *J Am Acad Child Adolesc Psychiatry* 29:571-580

Flisher AJ, Kramer RA, Hoven CW and others (1996). Psychosocial characteristics of physically abused children and adolescents. *J Am Acad Child Adolesc Psychiatry* 36:123-131

Fristad MA, Gavazzi SM, Centolella DM, Soldano KW (1996). Psychoeducation: a promising intervention strategy for families of children and adolescents with mood disorders. *Contemp Fam Ther* 18:371-383

Fritz GK (1997). Child, adolescent depression distinct from the adult version. *Behavioral Health Treatment*, 2(10):1-3

Geller B, Reising D, Leonard H and others (1999). Critical review of tricyclic antidepressant use in children and adolescents. *J Am Acad Child Adolesc Psychiatry* 38:513-517

Goodyer IM, Herbert J, Secher S, Pearson J (1997). Short-term outcome of major depression, I: comorbidity and severity at presentation as predictors of persistent disorder. *J Am Acad Child Adolesc Psychiatry* 36:179-187

Gotlib IH & Hammen CL (1992). *Psychological aspects of depression: Toward a cognitive-interpersonal integration*. London: Wiley.

Hammen C (1991). *Depression runs in families: The social context of risk and resilience in children of depressed mothers*. New York: Springer-Verlag.

Harrington R, Whittaker J, Shoebridge P, and Campbell F (1998). Systematic review of efficacy of cognitive behaviour therapies in childhood and adolescent depressive disorder. *British Med Journal* 316:1559-1564

Harter S, Marold DB & Whitesell NR (1992). Model of psychosocial risk factors leading to suicidal ideation in young adolescents. *Development and Psychopathology* 4:167-188

Hazell D, O'Connell D, Heathcote D and others (1995). Efficacy of tricyclic drugs in treating child and adolescent depression: a meta-analysis. *British Med Journal* 310: 897-902

Ingersoll BD & Goldstein S (1996). *Lonely, sad, and angry: a parent's guide to depression in children and adolescents*. New York, NY: Doubleday

JAMA (1992). The changing rate of major depression: cross-national comparisons. *Journal of Am Med Assn* 268:3098-3105

Jacobson NS, Dobson KS, Truax PA and others (1996). A component analysis of cognitive-behavioral treatment for depression. *J Consult Clin Psychol* 64:295-304

Jarrett RB and others (1999). Treatment of atypical depression with cognitive therapy or phenelzine: A double-blind, placebo-controlled trial. *Journal of the American Medical Association*, 56:431-437

Jensen PS, Watanabe HK, Richters JE and others (1996). Scales, diagnoses, and child psychopathology: II. Comparing the CBCL and DISC against external validators. *J. Abnorm. Child Psychol.* 24:151-168

Kazdin AE (1995). *Conduct disorder in childhood and adolescence* (2nd ed.). Thousand Oaks, CA: Sage

Kazdin AE & Weisz JR (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66, 19-38

King CA, Hovey JD, Brand E and others (1997). Prediction of positive outcomes for adolescent psychiatric inpatients. *J Am Acad Child Adolesc Psychiatry* 36:1424-1442

Korenblum M (1998). Guidelines for the practice of psychotherapy with children and adolescents. In: *Standards and Guidelines for the Psychotherapies*, P Cameron, J Ennis, & J Deadman (Eds.), Toronto: Univ of Toronto Press, pp 241-291

Kovacs (1997). The Emmanuel Miller Memorial Lecture. Depressive disorders in childhood: an impressionistic landscape. *Journal of Child Psychology and Psychiatry* 38:287-298

Kovacs M (1996). Presentation and course of major depressive disorder during childhood and later years of the life span. *J Am Acad Child Adolesc Psychiatry* 35:705-715

Kroll L, Harrington R, Jayson D, Fraser J, Gowers S (1996). Pilot study of continuation cognitive-behavioral therapy for major depression in adolescent psychiatric patients. *J Am Acad Child Adolesc Psychiatry* 35:1156-1161

Kutcher S (1997) Practitioner review: the pharmacotherapy of adolescent depression. *Journal of Child Psychology and Psychiatry* 38:755-767

Lavoie E and Hodgins S (1994). Mental disorders among children with one parent with a lifetime diagnosis of major depression. In: *A Critical Review of the Literature on Children at Risk for Major Affective Disorders*, S Hodgins, C Lane and others (Eds.) Ottawa: The Strategic Fund for Children's Mental Health, pp 37-82.

Leonard HL, March J, Rickler KC, Allen AJ (1997). Review of the pharmacology of the selective serotonin reuptake inhibitors in children and adolescents. *J Am Acad Child Adolesc Psychiatry* 36:725-736

Lewinsohn PM & Clark GN (1999) Psychosocial treatments for adolescent depression. *Clinical Psychology Review* 19:329-342

Lewinsohn PM, Zinbarg R, Seeley JR, Lewinsohn M, Sack WH (1997). Lifetime comorbidity among anxiety disorders and between anxiety disorders and other mental disorders in adolescents. *J Anxiety Disord* 11:377-394

Lewinsohn PM, Hops H, Roberts RE, Seeley JR, Andrews JA (1993). Adolescent psychopathology, I: prevalence and incidence of depression and other DSM-III-R disorders in high school students. *J Abnorm Psychol* 102:133-144

Marton P, Korenblum MP, Kutcher M, Stein S, Kennedy B, Pakes J (1989), Personality dysfunction in depressed adolescents. *Can J Psychiatry* 34:810-813

Mufson L, Weissman MM, Moreau D, & Garfinkel R (1999). Efficacy of interpersonal psychotherapy for depressed adolescents. *Arch Gen Psychiatry* 56:573-579

Mufson L, Fairbanks J (1996). Interpersonal psychotherapy for depressed adolescents: a one-year naturalistic follow-up study. *J Am Acad Child Adolesc Psychiatry* 35:1145-1155

Mufson L, Moreau D, Weissman MM & Klerman G (1993). *Interpersonal therapy for depressed adolescents*. New York: Guilford

Nolen-Hoeksema S & Girgus JS (1994). The emergence of gender differences in depression during adolescence. *Psychol Bull* 115:424-443

Reinecke MA, Ryan NE, DuBois DL (1998). Cognitive-behavioral therapy of depression and depressive symptoms during adolescence: a review and meta-analysis. *J Am Acad Child Adolesc Psychiatry* 37:26-34

Reinherz HZ, Stewart-Berghauer G, Pakiz B and others (1989). The relationship of early risk and current mediators to depressive symptomatology in adolescence. *J Am Academy Child Adolescent Psychiatry* 28:942-947

Ryan ND & Varma D (1998) Child and adolescent mood disorders -- experience with serotonin-based therapies. *Biological Psychiatry*, 44:336-340

Seligman, ME (1995). The effectiveness of psychotherapy. The Consumer Reports study. *American Psychologist* 50:965-974.

Stark K, Napolitano S, Swearer S and others (1996). Issues in the treatment of depressed children. *Appl Prey Psychol* 5:59-83

Stewart JW, McGrath PJ, Rabkin JG, Quitkin FM (1993). Atypical depression: a valid clinical entity? *Psychiatr Clin North Am* 16:479-494

Vostanis P, Feehan C, Grattan E, Bickerton W (1996). A randomized controlled out-patient trial of cognitive-behavioral treatment for children and adolescents with depression: nine-month follow-up. *J Affect Disord* 40:105-116

APPENDIX 1

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