Depressive Disorder in Children and Adolescents:
Dysthymic Disorder and the Use of
Self-Rating Scales in Assessment

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ABSTRACT: The authors describe a pilot study on depressed children and adolescents, where the DSM-III diagnosis on clinical interviews is compared to the results from two self-rating scales on 35 children and adolescents referred to the researchers. These 35 subjects were seen as depressed by their primary helpers. The value of the self-rating scales is mentioned and the usefulness of the category "dysthymic disorder" is commented upon.

The diagnosis of depression in children and adolescents is well accepted and the criteria used are well delineated. The more controversial diagnosis of dysthymic disorder is more all-encompassing and includes dysphoria and anhedonia, and twelve other criteria including: poor performance in school, lack of ability to concentrate, and irritability and excessive anger towards parents and caretakers. These last three criteria are present in the separation anxiety disorders, attention deficit disorders, and conduct disorders. Some dysthymics respond to antidepressants and for this, if for no other reason, careful diagnosis is important.

We are interested to see what proportion of 8- to 17-year-olds referred to us as having depressive symptoms would be diagnosed as having dysthymic disorder. Also, we wanted to see whether rating scales distinguished between affective and non-affective disorders and between major affective and dysthymic disorders.

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The importance of different sources of information in making diagnoses in child and adolescent psychiatry is only recently being stressed. We wanted to compare several self-report scales and parent scales and to see how they correlated with the diagnosis on psychiatric interview. Children are often seen as not capable of, or reliable in, reporting depressed feelings, and recent finding show that child and parent reports of depression are discrepant.3

These interests led to the pilot study we report here.

**Procedure**

Thirty-five subjects ages 8 to 17 years and suspected of being depressed were referred over a one-year period from the psychiatry out-patient, in-patient, and emergency services where about 300 new cases under ages 18 years are seen annually. No patients with signs of mental retardation or organicity were included. These 35 subjects were assessed by a psychiatric interview, three self-report scales, and two questionnaires completed by parents or parent surrogates when available (some will be described elsewhere).

Usually the psychiatric interview was done first. At all times, the interviewers were blind to the results of the other procedures.

On each subject, the interviewing psychiatrist made a DSM-III Axis I diagnosis, based on an interview with the child and referral information. The DSM-III criteria for diagnosing affective disorders were carefully used for each subject and questions for each criterion asked. Regardless of diagnosis, each child was rated on a Dysthymic Check List (DCL) containing the 14 criteria, each rated on a three-point severity scale. The DCL allowed us to derive a measure and the number of the severity of depressive symptoms in all cases referred.

Interrater reliability between the two psychiatrists was conducted on a subsample of the first 11 interviews, of which eight were conducted separately and three together, but the diagnosis and DCL were always completed separately. In four cases there was disagreement, and the final diagnosis was resolved by discussion. (The Kappa coefficient for agreement of diagnosis was 0.79.)

**Self-Report Measures**

The Children's Depression Inventory (CDI),4 a 27-item measure, and the Children's Depression Scale (CDS),5 a 66-item measure, were used. The CDS is arranged into five depression subscales (affect, social, self-esteem, preoccupation with sickness and death, and guilt), a miscellaneous depression subscale, and pleasure subscale. The subject was left to fill in these self-report measures after being instructed how to do so and when the investigator was satisfied that the instructions were understood.
Parent Report Measures

The Children's Depression Scale for Parents (CDS-P)\(^5\) is the modified version of the self-report scale for children and it allows parents to rate the severity of depression in their child or adolescent. Instead of the card sort format recommended by the manual, the items were transferred to a pencil and paper questionnaire format. The same subscale scores are derived to allow direct comparison to their child's responses.

Results

Diagnoses

Seventeen of the 35 subjects were diagnosed as suffering from affective disorders. Eight had major affective disorder and nine dysthymic disorder. Eighteen were diagnosed as having other disorders, of which nine were conduct disorders.

Age

The mean age for major affective disorders was 14.5 years; for dysthymic disorders 14.8 years; and for other disorders 11.6 years. There is a significant difference in the ages between affectives and other disorders, according to a one-way analysis of variance (\(F=32.44, \text{ d.f.} = 1,33, p \leq .0001\)). There is no significant age difference between the major affectives and dysthymics.

Sex

There were four males and four females in the major affective disorder group, four males and five females in the dysthymic disorder group, and eleven males and six females in the other disorder group.

From Table 1 it can be seen that the CDI, CDS, and DCL distinguish between major affective, dysthymic, and other disorders.

The CDI did not differentiate between major depression and dysthymic disorder but it did between major depression and other disorders (\(F=8.91, \text{ d.f.} = 1,32, p \leq .01\)) and between dysthymic disorders and other disorders (\(F=8.36, \text{ d.f.} = 1,32, p \leq .01\)).
The CDS

One-way analysis of variance confirmed that reports of children with affective diagnoses indicated significantly more severe levels of depression than reports of children with non-affective diagnosis on all total scales and subscales of the CDS except the Guilt subscale. The CDS showed a trend to differentiate between major depression and dysthymic disorders \( (F=3.16, \text{d.f.}=1,32, p<.10) \) and did differentiate between major depressions and other disorders \( (F=9.41, \text{d.f.}=1,32, p<.01) \), but it did not distinguish between dysthymic disorders and other disorders.

The CDS-P

The results, using one-way analysis of variance, show that there are no significant differences between children with an affective disorder diagnosis compared to those with a non-affective disorder diagnosis (Table 2). In fact, parents tended to rate those children with a non-affective disorder diagnosis as more depressed that those with an affective disorder diagnosis.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Major Depression</th>
<th>Dysthymic</th>
<th>Other</th>
<th>F Value</th>
<th>df*</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDI (total)</td>
<td>19.38</td>
<td>19.00</td>
<td>6.40</td>
<td>7.72</td>
<td>2,32</td>
<td>.002</td>
</tr>
<tr>
<td>CDS (total)</td>
<td>166.13</td>
<td>141.89</td>
<td>119.06</td>
<td>5.16</td>
<td>2,32</td>
<td>.01</td>
</tr>
<tr>
<td>DCL (total)</td>
<td>17.25</td>
<td>15.00</td>
<td>7.72</td>
<td>19.77</td>
<td>2,32</td>
<td>.0001</td>
</tr>
</tbody>
</table>

*degrees of freedom

CDI Children's Depression Inventory
CDS Children's Depression Scale
DCL Dysthymic Check List

**TABLE 1**

**TABLE COMPARING TOTAL SCORES ON TWO RATING SCALES AND DYSTHYMIC CHECK LIST USING ONE WAY ANALYSIS OF VARIANCE**
Discussion

We diagnosed a higher proportion of dysthymic disorders in our sample than others (9/35). In only one study, a high proportion of adolescent dysthymics (24/45) is reported. They included subjects as dysthymic even when they had symptoms for only four months (DSM-III criterion is one year).

Akiskal deplores the emphasis on "severe syndromal and episodic illness of biological origin" in diagnosing affective disorders. He suggests considering affective disorders in "patients with a mild to moderate depression with a chronic relapsing course, and a characterological disturbance," but who may "suffer from an underlying primary affective disorder that is responsive to thymoleptic medication." The onset may be late, variable, and early; the latter can be divided into primarily subaffective disorders. The subaffective disorders have a family history of affective disorder and a good response to tricyclics, lithium, or both. We suggest that the subaffective disorders may be fully developed in adolescents but not often diagnosed by clinicians.

The DSM-III manual suggest "attention deficit disorders, conduct

<table>
<thead>
<tr>
<th>Scale</th>
<th>Affective</th>
<th>Non-Affective</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS-P −</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Depression</td>
<td>136.15</td>
<td>139.29</td>
<td>N.S.*</td>
</tr>
<tr>
<td>CDS-P −</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Anhedonia</td>
<td>49.85</td>
<td>49.86</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

*Not Significant
disorders, mental retardation, severe specific developmental disorder, and also an inadequate disorganized rejecting and chaotic environment” are predisposing factors to the dysthymic disorders which “are common in adults with an age of onset early in adult life.” With these common predisposing factors, an onset in adolescence would be more likely.

In one sample of affective disorders in children, only 2/28 dysthymics were found, and in another two samples on children with cardiac symptoms and orthopedic symptoms, 13% and 23% met criteria for major affective disorders, respectively, but no mention was made of dysthymic disorder. This is surprising, as Akiskal has found that several adult dysthymics suffered from rheumatologic or neurologic disease, often with an onset in childhood. It would seem that dysthymic disorder is either not being recognized or is subsumed under another category.

We suggest that dysthymic disorder in the 8- to 17-year-olds has been diagnosed less frequently than the DSM-III criteria warrant. This is especially important if some dysthymics do respond to medication.

The self-rating scales help in distinguishing affective disorders from other disorders and dysthymic disorders from major affective disorders to an extent. It may be insufficient to consider only the interview or only the results of questionnaires. In one sample of suicidal subjects, 10% denied suicidal ideation on the CDI and then admitted to it on interviews, and 2% did the opposite. Both approaches are needed. In our study the subjects were left to complete the self-rating scales so they could be competely alone. The questions on the self-rating scales were similar to those asked in interviews but the responses were sometimes different.

The diagnosis of depression in children can be made by interviewing the child and the main caretaker, and self-rating scales may assist in those cases where there is some doubt.
References