Congruence Between Psychiatrist, Inpatient Child and Parent Regarding Depressive Diagnosis

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Abstract

Objective: This study on inpatient children reports on the congruence of a clinician's DSM-IV diagnosis versus a patient-administered scale (CDI) versus the parent's report of depression.

Methods: The sample comprised 111 children, 5 to 15 years of age admitted to our child psychiatry unit. Sixty-three of the children had a DSM-IV diagnosis of depression and 48 did not. Children completed the CDI.

Results: CDI scores differed significantly ($p < .0001$) between children with depression and children without depression. Positive and negative predictive power were high (79% and 61%). Within the depressed group, percent agreement for depression was 81% for the child psychiatrist and child, and 81% for the psychiatrist and parent.

Conclusion: The CDI is a valuable instrument in the inpatient assessment of children and is a good predictor of depressive diagnosis.

Methods:

Sample:

The sample comprised 111 children (66 males) 5 to 15 years of age admitted to our child psychiatry unit from 2001–2002. Sixty-three of the children had a DSM-IV diagnosis of depression (major depressive disorder, dysthymic disorder, depressive disorder-NOS, or adjustment disorder with depressed mood), and 48 did not have any mood disorder. The majority of children without depression had DSM-IV diagnosis of a disruptive behavior disorder. Diagnoses were made at discharge by a board certified child psychiatrist based on a semi-structured diagnostic interview including a standardized symptom inventory with both the child and the parent. In addition to the clinical evaluation, children completed the Children's Depression Inventory (CDI), which consists of 27 items rated on a 3-point scale. Parents completed the Early Childhood Mood Disorders Screen, including an item indicating whether or not they thought their child was depressed.

Data Analyses:

The significance of differences in CDI scores between children with and without clinical diagnoses of depression was determined using an independent t-test. Data were analyzed to determine the CDI cutpoint which maximized diagnostic accuracy. The accuracy of child and parent report in predicting the clinical diagnosis was determined by calculating sensitivity (percentage of children correctly identified as having depression), specificity (percentage correctly classified as not having depression), positive predictive power (percent of children with an abnormal score who were depressed), and negative predictive power (percent with a normal score who were not depressed). Z-scores were used to determine the significance of agreement between the psychiatrist, child, and parent.

Results

CDI Scores

CDI scores differed significantly ($t = 4.2$, $p = .0001$) between children with clinical diagnoses of depression ($M = 19.5$, $SD = 10.4$, range 1-46) and children without depression ($M = 10.7$, $SD = 7.4$, range = 0-29) **(Figure 1).**

Diagnostic Accuracy

The CDI cutpoint which maximized diagnostic accuracy was 12. Seventy-nine percent of children with a clinical diagnosis of depression had a CDI score of 12 or higher and, therefore, were correctly classified as depressed (sensitivity). Specificity (percent correctly identified as not depressed) was 73%. Positive and negative predictive power were also high. Seventy-nine percent of children with abnormal CDI scores were depressed, and 61% with normal scores were not depressed, based on their clinical diagnoses **(Figure 4).**

Percent Agreement

Within the depressed group, percent agreement for depression was 81% for the child psychiatrist and child and 81% for the psychiatrist and parent ($z = 4.4$, $p < .0001$). However, only psychiatrist-child agreement was close to significant for children without depression, with 68% of these children rating themselves as not depressed on the CDI ($z = 1.9$, $p = .06$). Psychiatrist-parent agreement in the nondepressed group was only 46% ($z = 0.4$, $p = .71$).

Overall parent-child agreement was 70% ($z = 3.6$, $p = .0003$). In 52% of the cases, the parent and child agreed that the child was depressed, 18% agreed that the child was not depressed, and 30% disagreed. When parents and children disagreed, parents were more likely than the child to perceive the child as depressed. Overall percent agreement was similar for the parent and child (70%), psychiatrist and child (76%), and psychiatrist and parent (69%), $z = 3.4 – 4.1$, $p < .001$ **(Figure 2).**

Diagnostic Accuracy of CDI Items

Nine of the CDI items significantly differentiated between children with and without clinical diagnoses of depression at .01 ($\div^2 = 6.8 – 16.1$). For this analysis, items were scored as positive or negative (e.g., # 7 "I like myself" = positive and "I do not like myself" and "I hate myself" = negative). The percentages of children with and without depression who endorsed the negative responses are reported in descending order of significance in **Figure 3**.

Summary:

•The CDI is a valuable instrument in the inpatient assessment of children.

•The CDI is a good predictor of depressive diagnosis.

• The strong agreement between the clinician and parent is in contrast to some previous studies.

•The alternate cut point of 12 may help in clinical assessment of an inpatient population.

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Figure 1: Children's Depression Inventory Mean Scores

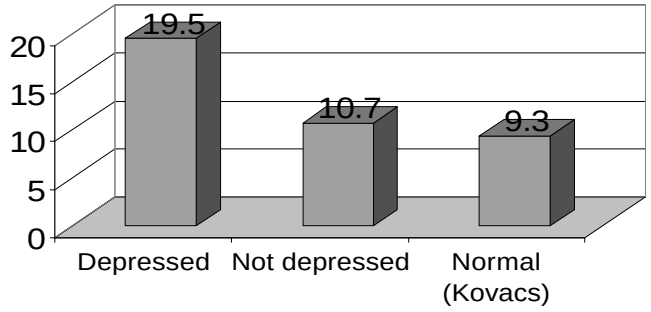

Figure 2: Overall Parent-Child Agreement

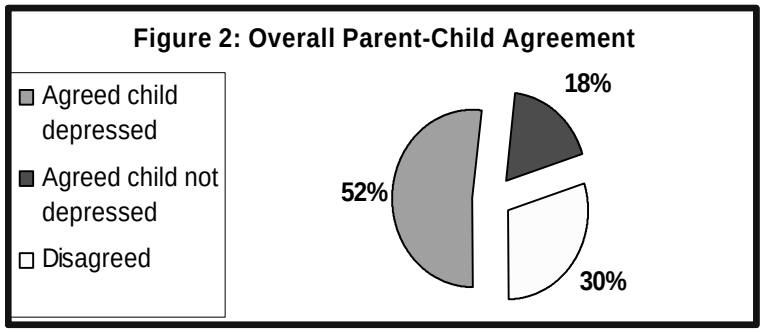

Figure 3: CDI Questions

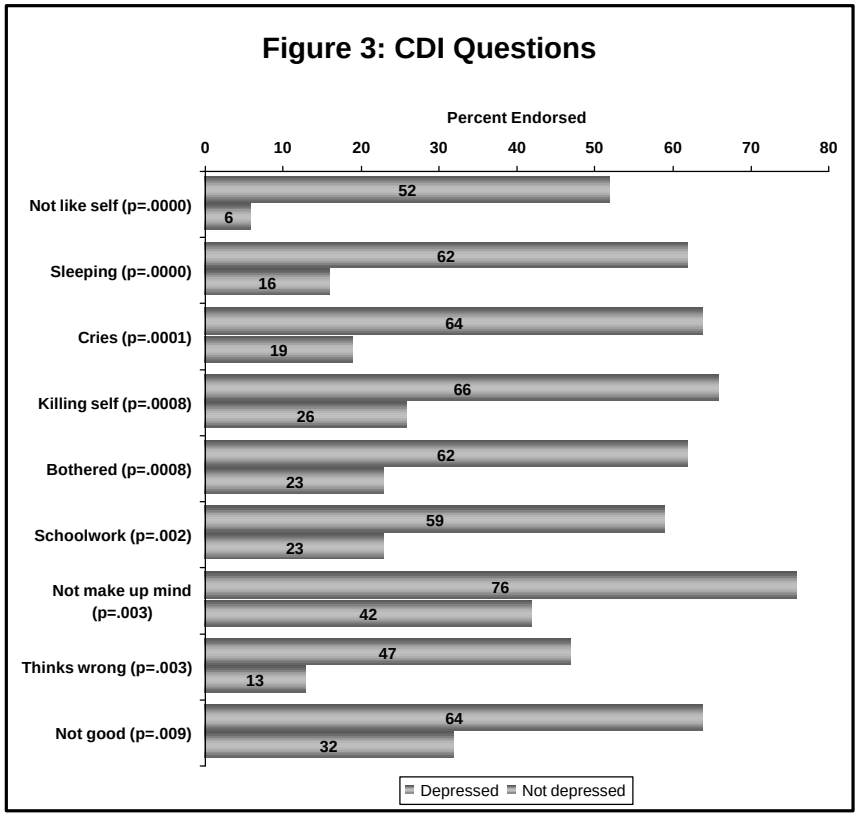

Figure 4: Diagnostic Accuracy