

phone number where you (yes, *you*) can be reached if any problems develop and arrange to see the patient within 3–4 days of initiating treatment.

11. **Eleventh**—increase the dose slowly at no more than 3–5 day intervals until your initial therapeutic dose is reached (the expected minimally effective daily dose), then wait for the required 6–8 weeks at this dose to determine efficacy. Never prescribe medication without at least offering supportive psychotherapy using cognitive or interpersonal techniques of support. See the patient **weekly** and allow for telephone check-in whenever the dose is increased or between visits if concerns arise. Always check for and record possible adverse events at each visit (use the form that you used at baseline so that you can compare symptom changes over time) and assess improvement at Weeks 2, 4, 5 and 6.

12. **Twelfth**—take advantage of the placebo response (found to be high in most adolescent depression trials) That is, invoke a similar approach to patient care as done in studies including frequent face-to-face contact early in the course of therapy, the development of a trusting and supportive rela-

tionship, efforts to measure response objectively and subjectively, and careful elicitation of side effects, overall tolerance, ongoing concerns, and satisfaction with treatment.

We believe that this represents good clinical care that is consistent with the “careful monitoring” advocated by the FDA and other organizations. This approach will not necessarily totally ameliorate the occurrence of behavioral side effects but it may cut down their prevalence and will help you quickly identify when they occur so that you can intervene. At the very least, this approach should cut down the temptation to simply “give a pill”, and in itself that would be a good thing.

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## The Kutcher Adolescent Depression Scale (KADS)

*Sarah Brooks, MD*

Many self-rated instruments that are often used to measure depression in adolescents (12–18 years) have limited or unknown reliability, validity, and sensitivity to change over time in this age group (Brooks & Kutcher, 2001). This is unfortunate because self-report scales have the potential to provide useful information quickly and cheaply. The self-rated depression scales most commonly used with adolescents include the 21-item Children’s Depression Inventory (Kovacs, 1992), the 21-item Beck Depression Inventory (BDI; Beck et al. 1961) and the 20-item adult and child versions of the Center for Epidemiology Depression Scale (CES-D; Fendrich et al. 1990; Radloff 1977). None of these scales have good discriminative validity in adolescents (Brooks & Kutcher, 2001). Although several other self-report scales may be better in this respect—for example, the 18-item Depression

Self-Rating Scale (DSRS; Birlleson 1981), the 30-item Reynolds Adolescent Depression Scale (RADS; Reynolds 1987) and the 32-item Mood and Feelings Questionnaire (MFQ; Costello & Angold 1988), the sensitivity to change over time of the RADS is not particularly good (Reynolds & Coats 1986), and the sensitivity to change of the MFQ and DSRS does not appear to have been examined in adolescent samples.

### Development of the KADS

In view of the need for a quickly administered, valid, sensitive-to-change, depression-rating scale for adolescents, Stanley Kutcher devised a new self-report scale—the Kutcher Adolescent Depression Scale (KADS). His original version of the KADS contained 16 items, which collectively assessed the frequency of occurrence and/or the severity of 16 core symptoms of adoles-

cent depression. This 16-item version has been tested in two studies (LeBlanc et al. 2002; Brooks et al 2003), one of which enabled assessment of the sensitivity to change of each item. As described below, on the basis of the data from this study, a 11-item version of the scale was developed, optimized for monitoring treatment effects over time.

### Testing the KADS

The psychometric properties of the 16 original items of the KADS were examined in a clinical sample of 106 adolescents enrolled in an 8-week, randomized, double-blind, placebo-controlled, pharmacotherapy trial for major depressive disorder. Subjects completed the 16-item KADS and were assessed by a clinician using the Children’s Depression Rating Scale-Revised (CDRS-R; Poznanski & Mokros 1996), the Clinical Global Impression of Severity scale (CGI-Severity), and the Global Assess-

ment of Functioning (GAF) scale at baseline and at weeks 1, 2, 3, 4, 6 and 8. Fifty-three (53) subjects were randomized to active drug and 53 to placebo. Respectively 47 (89%) and 43 (81%) of these subjects completed the 8-week study, and clinicians gave respectively 33 (70%) and 31 (72%) of these study completers lower CGI-Severity ratings at Week 8 than at baseline. Given the similarity in outcome of the two groups, group was disregarded in subsequent analyses of the KADS item scores. KADS items were each ranked on two different estimates of sensitivity to change:

1. the absolute change in item score between baseline and Week 8: This was calculated for each subject who completed the study and then the mean value was calculated.

2. how well the apparent changes in severity documented by subjects' CGI-Severity scores were mirrored by corresponding changes in each of their KADS item scores: For each KADS item, the set of scores attained by a subject at his/her seven assessments (or fewer, if he or she exited the study early) were correlated his/her own CGI-Severity scores.

This within-subject correlation was calculated for each subject who completed at least three visits ( $n = 100$ ) and the mean of subjects' correlation coefficients was calculated for each KADS item.

Each KADS item was ranked on both estimates of its sensitivity to change and then its mean rank was calculated. Ten items with the highest mean ranks exhibited fairly large mean changes in score from baseline to week 8 and their scores correlated well or moderately well with CGI-Severity scores. The item with mean rank of 11 exhibited a much smaller change in score from baseline to week 8 but its scores also correlated moderately well with CGI-Severity scores. This item concerned suicide and self harm and was considered important for inclusion in a measure of treatment efficacy. Thus an 11-item version of the KADS was devised for monitoring changes in symptomatology over time.

Compared to the other clinician-rated instruments used in this study (the CDRS-R and the GAF), subjects' total scores on this 11-item version of the KADS exhibited significantly greater mean changes from baseline to week 8. Total scores on the 11-item KADS also formed moderate to strong mean within-subject correlations with all of the clinician-rated scales. These results suggest that the 11-item KADS is both a sensitive and valid measure of changes in depression severity over time.

### Applications

The 11-item version of the KADS presented here is optimized for monitoring outcome in adolescents (12–17 years) who are receiving (pharmacologic) treatment for major depressive disorder. Its items are worded using standard and colloquial terminology, and responses are scored on a simple 4-point scale. The scale can be completed and hand scored in 5 minutes. In every item, score: (a) = 0; (b) = 1; (c) = 2; and (d) = 3. Then add all 11 item scores to form a single Total Score. As for interpretation of total scores there are no validated diagnostic categories associated with particular ranges of scores. All scores should be assessed relative to an individual patient's baseline score (higher scores indicating worsening depression, lower scores suggesting possible improvement).

The short, simple format of the KADS should prove acceptable to patients and to clinicians alike. Mental health practitioners as well as pharmaceutical and university research professionals who wish to establish the efficacy of treatment for adolescent depression are likely to find this instrument very useful. (The 11-item KADS is available in both paper and electronic formats.)

The original 16-item version of the KADS may be of interest to researchers who wish to assess the frequency and severity of a wider range of core symptoms of adolescent depression. This scale is included as a supplement to this issue of the newsletter (CAPN

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# Kutcher Adolescent Depression Scale (11-Item)

Over the last week, how have you been “on average” or “usually” regarding the following items:

1. low mood, sadness, feeling blah or down, depressed, just can't be bothered.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
2. irritable, losing your temper easily, feeling pissed off, losing it.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
3. sleep difficulties - different from your usual (over the years before you got sick): trouble falling asleep, lying awake in bed.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
4. feeling decreased interest in: hanging out with friends; being with your best friend; being with your boyfriend/girlfriend; going out of the house; doing school work or work; doing hobbies or sports or recreation.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
5. feelings of worthlessness, hopelessness, letting people down, not being a good person.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
6. feeling tired, feeling fatigued, low in energy, hard to get motivated, have to push to get things done, want to rest or lie down a lot.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
7. trouble concentrating, can't keep your mind on schoolwork or work, daydreaming when you should be working, hard to focus when reading, getting “bored” with work or school.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
8. feeling that life is not very much fun, not feeling good when usually (before getting sick) would feel good, not getting as much pleasure from fun things as usual (before getting sick).
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
9. feeling worried, nervous, panicky, tense, keyed up, anxious.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
10. physical feelings of worry like: headaches, butterflies, nausea, tingling, restlessness, diarrhea, shakes or tremors.
  - a) hardly ever
  - b) much of the time
  - c) most of the time
  - d) all of the time
11. Thoughts, plans or actions about suicide or self-harm.
  - a) no thoughts or plans or actions
  - b) occasional thoughts, no plans or actions
  - c) frequent thoughts, no plans or actions
  - d) plans and/or actions that have hurt

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