CLINICAL DEMENTIA RATING

DEAR SIR,

Essential to many research approaches to Alzheimer's disease is a means for staging the severity of the disease. Your Journal published our Clinical Dementia Rating (*Journal,* **140,** 566–572, 1982). From our further work we have found it advantageous to refine the rating scale by the removal of certain ambiguities.

The new improved version is as shown.

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Clinical Dementia Rating (CDR)
CDR 0 0.5 1 2 3

	Healthy CDR 0	Questionable dementia CDR 0.5	Mild dementia CDR 1	Moderate dementia CDR 2	Severe dementia CDR 3
Memory	No memory loss or slight inconsistant forgetfulness	Mild consistent forgetfulness; partial recollection of events; "benign" forgetfulness	Moderate memory loss, more marked for recent events; defect interferes with everyday activities	Severe memory loss; only highly learned material retained; new material rapidly lost	Severe memory loss; only fragments remain
Orientation	Fully oriented		Some difficulty with time relationships; oriented for place and person at examination but may have geographic disorientation	Usually disoriented in time, often to place	Orientation to person only
Judgement + problem solving	Solves everyday problems well; judgement good in relation to past performance	Only doubtful impairment in solving problems, similarities, differences	Moderate difficulty in handling complex problems; social judgement usually maintained	Severly impaired in handling problems similarities, differences; social judgement usually impaired	Unable to make judgements or solve problems
Community affairs	Independent function at usual level in job, shopping, business and financial affairs, volunteer and social groups	Only doubtful or mild impairment in these activities	Unable to function independently at these activities though may still be engaged in some; may still appear normal to casual inspection	No pretense of independent function outside home Appears well enough to be taken to functions outside a family home	Appears too ill to be taken to functions outside a family home
Home + hobbies	Life at home, hobbies, intellectual interests well maintained	Life at home, hobbies, intellectual interests slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned	Only simple chores preserved; very restricted interests, poorly sustained	No significant function in home outside of own room
Personal care	Fully capable of self care		Needs prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care; often incontinent

Score only impairment due to cognitive loss, not impairment due to other factors.

REVERSIBLE DEMENTIA AND DEPRESSION

DEAR SIR,

In their article on "reversible dementia caused by depression", Rabins *et al.* (*Journal,* May 1984, **144,** 488–92) set out as a major objective the validation of criteria for distinguishing patients with "reversible dementia caused by depression" from irreversibly demented patients. This is an important issue, given that the pre-existing literature in this area consists largely of uncontrolled clinical observations. However, their study gives rise to some problems which may cast doubt on their conclusions.

First, the authors list several clinical variables which are reported to discriminate between patients with "reversible depression caused by dementia" and demented (but not depressed) controls. These variables include depressed mood, past history of

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depression, depressive delusions and appetite disturbance. Given that the demented-depressed patients were selected on the basis of their fulfilling DSM III criteria for major depression, it is hardly surprising that they exhibit a greater frequency of depressive phenomena (i.e. the authors have demonstrated that patients who fulfil criteria for depression are more likely to be depressed than those who do not).

The only clinical variable *not* related to selection criteria that they list is the median duration of symptoms. Rabins *et al* found that the median duration of symptoms for the demented-depressed patients was two months, compared with five years for the non-depressed demented controls. It is surprising that the authors present this finding without comment, since it supports previous clinical observations (Kiloh 1961, Well 1979).

The second problem which arises concerns the "predictive values" calculated by the authors. For example, 10 of the 18 demented-depressed patients were regarded as suffering from appetite disturbance, as compared with 4 of the non-depressed demented controls. The authors have calculated the "predictive value" of appetite disturbance as $10/(10+4) = 71\%$. This figure will in fact refer only to a population in which there is an equal number of demented-depressed and non-depressed demented patients, i.e. a population of demented patients in which the prevalence of depression is 50% (this is because predictive values vary with prevalence [Galen & Gambino 1975] and failure to appreciate this point can give rise to serious errors in interpretation of results [Williams *et al*, 1982]). Rabins *et al* quote evidence to indicate that the prevalence of depression in a series of referrals for dementia is about 9%. Thus, the predictive value of appetite desturbance (for predicting the occurrence of depression) in such a series of patients can be estimated to be not 71%, but about 20%.

Finally, a comment on the title of the paper. "Reversible dementia *caused by* depression" might more appropriately be described as "reversible dementia *associated with* depression". There is insufficient evidence confidently to regard the relationship as cause-and-effect. This is emphasised by Rabins *et al's* finding that 3 of the 18 demented-depressed patients "remained cognitively impaired" despite an improvement in their depressive symptoms.

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References

GALEN, P. S. & GAMBINO, S. R. (1975) *Beyond normality: the predictive value and efficiency of medical diagnosis*. Wiley: New York.

KILOH, L. G. (1961) Pseudodementia. *Acta Psychiatrica Scandinavica*, **37**, 336–51.

WELLS, C. E. (1979) Pseudodementia. *American Journal of Psychiatry*, **136**, 895–900.

WILLIAMS, P., HAND, D. & TARNOPOLSKY, A. (1982) The problem of screening for uncommon disorders—a comment on the eating attitudes test. *Psychological Medicine*, **12**, 431–4.