

GENERAL INSTRUCTIONS FOR USE OF THE DRS-R-98

The Delirium Rating Scale-Revised-98 (DRS-R-98) is a 16-item clinician-rated scale with two sections and a score sheet. The 13-item severity section can be scored separately from the 3-item diagnostic section; their sum constitutes the total scale score. The severity section functions as a separate scale for repeated measures at short intervals within an episode of delirium. The total scale can be scored initially to enhance differential diagnosis by capturing characteristic features of delirium, such as acute onset and fluctuation of symptom severity. Concomitant use of diagnostic criteria such as from the International Classification of Disease (ICD)-10 Research Manual or versions of the Diagnostic and Statistical Manual (DSM) will enhance its ability to measure delirium when demented patients are involved because the DRS-R-98 is mostly a severity scale.

All items are anchored by text descriptions as guides for rating along a continuum from normal to severely impaired. Severity items are rated from 0 to 3 points and diagnostic items from 0 to either 2 or 3 points. The scoresheet offers space to circle item ratings and to optionally note characteristics of symptoms (e.g., type of hallucination) or the condition of patients during the ratings (e.g., restrained).

Though designed to be rated by psychiatrists, other physicians, nurses, and psychologists can use it if they have had appropriate clinical training in evaluating psychiatric phenomenology in medically ill patients. It can be used in research or comprehensive clinical evaluations. It does require enough clinical expertise to distinguish, for example, language problems from thought process abnormalities or delusions from confabulation. Even with sufficient clinical expertise, at times it may be difficult to make certain distinctions and more than one item may need to be rated to reflect that presentation (e.g., Wernicke's aphasia and severe loose associations).

The DRS-R-98 can be used in conjunction with the Delirium Rating Scale (DRS) for certain research purposes because they differ substantially in descriptions of items. For example, the DRS may be more helpful for patients emerging from stupor.

The DRS-R-98 measures symptoms without regard to cause. Thus, preexisting conditions may add points, for example, dysphasia will affect the language item. However, longitudinal ratings will clarify effects of preexisting conditions after the delirium has cleared. The inclusion of mentally retarded and Cognitive Disorder Not Otherwise Specified subjects during the validation study suggests that delirium can still be reliably assessed in the presence of such confounds.

All sources of available information are used to rate the patient—family, visitors, hospital staff, doctors, medical chart, and so on. Even a hospital roommate can contribute information. During interviews for such collateral information, ensure that terms used are mutually understood before accepting others' interpretation of symptoms.

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Any time frame can be chosen for the DRS-R-98. Time frames greater than 24 hours are probably not necessary as this coincides with circadian rhythms and their possible disruptions. Shorter periods (e.g., 4 to 12 hours) may be helpful for intervention assessment—either for clinical or research purposes—though the fluctuating nature of symptom severity may need to be considered when interpreting the scores. Choosing periods less than 2 hours risks not adequately capturing some items (e.g., hallucinations, sleep-wake cycle disturbance) that occur intermittently. In such circumstances, a researcher may wish to use a smaller subset of items to monitor the patient, though such a subscale has not been validated.

Some items are rated based on examination and history, while others incorporate formal testing (e.g., cognitive and language items). It may be useful for a given clinician to standardize the questions used routinely in his/her practice, for example, asking months of the year backwards for attention, clockface or puzzle pieces for visuospatial ability, and particular items for confrontational naming. Adjunctive use of the Cognitive Test for Delirium (CTD) or some of its items offers the advantage of not needing the patient to write or speak. Evaluation of general information included in the long-term memory item should be geared appropriately to the educational and cultural background of the patient.

When both interview behavior and formally elicited responses are used, the relative contribution of each needs to be weighed by the clinician and a scoring judgment needs to be made. For example, on the attention item a patient has difficulty with reciting months of the year backwards but attends fairly well during the interview, or on long-term memory a patient recalls personal remote information accurately, but cannot recall well on formal testing of three words after 15 minutes.

Despite text descriptions for each item rating, the rater may need to exercise judgment in scoring. At times an intermediate rating with a 0.5 point interval may be needed (e.g., 2.5 points) if the rater cannot decide between two choices. Also, the time frame chosen may affect how to weigh the presence of certain symptoms. For example, a patient who has periods of intense hyperactivity and hypoactivity in a 24-hour period would be rated as “3” on both items #7 and 8. If this same patient is rated for a shorter interval that only involved hyperactivity, then item #7 would be rated as “3” and item #8 would be “0”.

In cases where an item cannot be rated at all, the rater should make a notation on the score sheet and decide later how to handle that item’s scoring. If used for research, a statistical consultant may have to advise. If used clinically, altering the denominator of the maximum possible score may be acceptable.

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