KINGSTON DEMENTIA

RATING SCALE

- KDRS -

Providence Care

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The Kingston Scales and Manuals can be freely downloaded from:

www.providencecare.ca ➜ Clinical Services ➜ Geriatric Psychiatry ➜ Kingston Scales

or email: kscales@queensu.ca

KINGSTON DEMENTIA RATING SCALE

I - Rating Form

Patient's Name:_____ Rater's Name:_____

Time of Rating:_____ Date of Rating:_____

Comments: _____

_____

_____

_____

_____

SUMMARY

	Score
I. Orientation	_____
II. Emotional Control	_____
III. Language	_____
IV. Items 18-21	_____
Total Score	_____

Consult the KDRS Instruction Manual when in doubt as to the scoring of an item.

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RECORD THE PATIENT'S ACTUAL RESPONSES AS WELL AS THE SCORE. THE "STATEMENTS" (in bold) ARE THE INSTRUCTIONS FOR THE PATIENT. IF AN IMMEDIATE RESPONSE IS NOT CALLED FOR, ONLY THE PATIENT'S BEHAVIOUR OVER THE LAST 7 DAYS SHOULD BE CONSIDERED.

I ORIENTATION

1. *Orientation to Place*

"**Where are you now?**" The patient must identify the type of facility, rather than its precise name.

Response:_____ Score:____

2. *Orientation to People*

Point to a staff member and ask - "**Does that person work here?**" Then point to a patient and ask - "**Does that person work here?**"

Response:_____ Score:____

3. *Orientation to Year*

"**What year is this?**"

Response:_____ Score:____

4. *Orientation to Month*

"**What month is this?**"

Response:_____ Score:____

5. *Orientation to Day of Week*

"**Which day of the week is this?**" (i.e. Monday?, Tuesday?...)

Response:_____ Score:____

6. *Orientation to Time of Day*

"**What time is it now?**" Patient must be accurate within 90 minutes to receive a zero score.

Response:_____ Score:____

7. *Orientation to Inside Surroundings*

"**I want you to show me where your washroom is**." Patient must be able to clearly direct rater to the washroom for a score of zero.

Score:____

8. *Orientation to Own Age*

"**How old are you?**" Response:_____ Score:____

9. *Wandering*

Patient roams aimlessly through the ward as if lost or looking for something.

Score:____

10. *Inaccurate Reporting of Events*

Patient talks about events that did not take place or talks as if they were presently somewhere else. Score:____

Example:_____

_____

Sub-Total (Orientation) ☐

II EMOTIONAL CONTROL

11. *Emotional Lability*

Inappropriate or unpredictable sudden changes in the patient's emotional state.

Score:____

12. *Aggression*

Physical striking only. Score:____

Sub-Total (Emotional Control) ☐

III LANGUAGE

13. *Inability to Write Own Name*

Use back of sheet. Ask for first and last names. Score:____

14. *Linguistic Expression*

Pencil_____Key_____Shoe_____Thumb_____ Score:____

15. *Understanding Written Language*

Must be able to read and understand the sentence "He shouted for help." on the back of the last page.

"What does this sentence mean or suggest to you?"

Response:_____

_____

_____ Score:____

16. *Understanding Spoken Language*

Must be able to understand the sentence "The room was filled with smoke."

Response:_____

_____

_____ Score:____

17. *Verbal Repetition*

Repetition of syllable, word or phrase.

Example:_____ Score:____

Sub-Total (Language) ☐

IV Items (18-21)

18. *Dressing* Score:____

19. *Incontinence*

Incontinence of urine or faeces during the day - but not "inappropriate voiding".
Score:____

20. *Motor Restlessness* Score:____

21. *Hoarding* Score:____

Sub-Total (Items 18-21) ☐

Total Score (Items 1-21) ☐

He shouted for help.

KINGSTON DEMENTIA RATING SCALE

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II - Instruction Manual

The Kingston Dementia Rating Scale was developed to monitor the condition of patients suffering from organic brain syndromes, especially progressive dementias such as Alzheimer's Disease. This is accomplished by determining the presence or absence of 21 symptoms or behaviours associated with dementia. Unlike other rating scales that trust entirely to a rater's memory and impressions, this scale requires a certain amount of patient participation.

The "Rating Form" of the scale is a five page booklet listing the 21 items with some instructions. Each item is scored either "0" for the absence of a symptom or "1" for its presence and, thereby, a score out of 21 is obtained. There are 4 groups of items or subsections to the scale and each of these is given a subtotal. These subtotals are recorded on the face sheet of the scale and on the "Kingston Dementia Rating Scale Summary" sheet in the patient's chart. The Summary sheet allows one to quickly check a patient's progress. The rater may be any staff member who is familiar with the patient's condition.

Item Instructions and Definitions

The following is a description of the items as they appear in the scale with definitions and instructions for each.

Section I - Orientation

This rather large section is very important as "disorientation" or "generalized mental confusion" is usually an early and major symptom of progressive dementias. To rate a patient on these 10 items the patient must be approached and taken aside to a quiet area, free of distractions. Items 1, 2, 3, 4, 5, 6, and 8 must be scored according to the patient's responses. On items 7, 9, and 10 knowledge of the patient's recent behaviour (within the preceding 7 days) may be employed. This time frame must be adhered to in order to obtain a current rating.

1. **Orientation to Place** - The patient is asked "Where are you now?" What is required for a score of 0 is to identify the type of facility, rather than its official name. For example, the response "hospital" is sufficient, rather than "Kingston Psychiatric Hospital".

2. **Orientation to People** - The rater should point to a nearby staff member and ask "Does that person work here?", then point to a nearby patient and ask "Does that person work here?" If the patient makes either one or two errors, a score of 1 is given.

3. **Orientation to Year** - The rater asks the patient "What year is this?" Often a patient may make a semi-correct response such as 1957 or 1887 for 1987. If this happens, repeat the question and ask the patient to think carefully.

4. **Orientation to Month** - The patient is asked to identify the current month.

5. **Orientation to Day of Week** - The patient should give the correct day of the week. If the patient responds with the date (i.e. day of month), say "But is it Monday, or Tuesday ...?".

6. **Orientation to Time of Day** - The patient must provide a time which is within 90 minutes of the Time of Rating recorded on page 1 of the Rating Form. If the patient fails to give a time after prompting, a score of 1 is given. The response "morning" or "afternoon" is NOT acceptable.

7. **Orientation to Inside Surroundings** - The ability to find the sex appropriate washroom is a useful indicator. The patient should be able to lead the rater directly to the washroom or give very clear instructions (not just point in the general direction) for a zero score. Sometimes it is useful to leave this item to the last and have the patient guide the rater to the target area. It is surprising how often the patient appears to be able to give a good explanation of where to get to the destination, but is unable to find it when asked to do so.

8. **Orientation to Own Age** - The patient must know his correct age (not the year in which he/she was born).

9. **Wandering** - To obtain a score of 1 on this item the patient must, in the last 7 days, have been found wandering aimlessly about the ward as if lost or looking for something. For example, a patient may wander in and out of other patients' rooms or the nursing station, or repeatedly try to open locked doors. Restless or agitated pacing is not what is being considered in this item (see item 20).

10. **Inaccurate Reporting of Events** - This item is scored when the patient talks about recent "events" that did not or do not exist (e.g. seeing cattle in the "fields" around the hospital), or talks as if he or she was presently somewhere else (e.g. "I am milking the cows"). This item includes the confabulation seen in alcoholic brain damage, and the inaccurate perceptions of organic brain syndrome patients. This also includes a patient's denial of immediately preceding behaviour.

Section II - Emotional Control

The following two items refer to exaggerated and/or sudden changes in mood that often are found in organically brain damaged patients. Knowledge of the patient over the previous 7 days is necessary for proper evaluation of patients on this section.

11. **Emotional Lability** - This refers to sudden and inappropriate changes in a patient's emotional state. For example, a patient may appear happy or even jovial and rapidly slip into a depressed and tearful state within minutes. Typically, it includes a patient who quickly changes from his or her normal disposition to one of anger or frustration despite no apparent cause. This does not include gradual changes in emotion or changes that have an appropriate basis.

12. **Aggression** - The patient must show definite unprovoked or inappropriate aggression such as striking or pushing a fellow patient or staff member. Note that aggression here only refers to physical aggression; not verbal outbursts. Normal ward tensions and outbursts that may have some reasonable justification should not be considered.

Section - III Language

The next 5 items deal with a patient's ability to communicate, which becomes disturbed as dementia progresses. It will be necessary to interact with the patient in order to make an accurate determination of his ability to communicate.

13. **Inability to Write Own Name** - The patient is asked to write both first and last names, and this must be accomplished within 60 seconds and be clearly legible.

14. **Linguistic Expression** - The patient is shown, one at a time, a "key", a "pencil", a "shoe", and your "thumb". After being shown each, he is then asked to name the object. All four must be correctly named to receive a zero score. Note that approximate answers are NOT acceptable (e.g. "finger" , "boot", "pen", "lock thing").

15. **Understanding Written Language** - The patient is shown the sentence "He shouted for help" (printed on the back of the Rating Form) and asked to read it. The patient is then asked to explain what the sentence means. The explanation should convey the idea that some problem exists or that someone is in distress.

If the patient fails to give a reasonable explanation or cannot read the sentence in the first place, a score of '1' is given. Be sure not to read the sentence to the patient while evaluating this item. Record the patient's explanation.

Examples of *acceptable* responses: "Someone may be hurt and wants help."
"He may be drowning."
"There may be a bear or snake or something."

Examples of *UNacceptable* responses: "He called for help."
"He asked for help."
"No one was near him."

16. **Understanding Spoken Language** - This item refers to a patient's ability to understand spoken language. Read the sentence, "The room was filled with smoke". Then ask, "What does this mean, or suggest to you?". An acceptable explanation should include the concept of fire or the statement of a consequence or hazard of smoke or fire (including cigarettes). *Note that deafness may confuse the issue and the rater should be reasonably sure that the patient heard the question.*

17. **Verbal Repetition** - This refers to the constant repetition of a syllable, word, or phrase. Give an example of the repeated word or phrase on the line provided.

Section - IV Items (18 - 21)

Items 18 to 21 refer to a number of important symptoms seen in dementia, but do not necessarily relate to each other in an organized fashion, as those within the previous 4 groups.

18. **Dressing** - Can the patient put on a shirt or dress by himself/herself within 5 minutes. If in doubt, give the patient a sweater or coat and ask them to put it on.

19. **Incontinence** - A patient scores "1" on this item only if he is incontinent of urine or faeces during the daytime, even though toilet facilities are readily available. Note that this item refers to incontinence and not "inappropriate voiding" in halls, corners, or plants, etc.

20. **Motor Restlessness** - This refers to restless pacing. This also includes agitated behaviour such as being unable to sit still or remain sitting for more than a few moments. (This item is not to be confused with item 9 where patients roam aimlessly about, appearing not to know where they are, or are going.)

21. **Hoarding** - Many patients with advanced dementias hoard a variety of articles such as Kleenex, clothes, dentures, and even faeces; both on their person and/or in drawers and other furniture. However, just having two of something instead of one, because of poor memory, is not considered hoarding.

Reference: Pelletier, F., Hopkins, R.W. and Hamilton, P. (1991) "Kingston Dementia Rating Scale" - *International Journal of Geriatric Psychiatry*, **6**, 227-233.

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KINGSTON DEMENTIA RATING SCALE

III - Score Interpretation

To aid in the interpretation of the Kingston Dementia Rating Scale, the following description of scores may be useful. This particular system is used by the Psychogeriatric Unit of Kingston Psychiatric Hospital where the Kingston Dementia Rating Scale was developed. It is intended only as a guide and some deviation from the descriptive terms used may be considered useful by individual clinicians.

A score of 0 is considered normal. A patient scoring 0 is unlikely to have clinically apparent signs of dementia but this does not rule out the very early stage of a progressive disorder.

A score of 1 to 3 is considered indicative of a mild degree of confusion or organic brain impairment.

A score of 4 to 6 is usually found in patients suffering from a moderate degree of organic brain dysfunction.

A score of 7 to 10 may be indicative of a patient with a more advanced state of organic brain dysfunction or suffering an acute confusional state.

Advanced states of dementia usually produce scores over 10. Scores are rarely found in excess of 16 or 17 in ambulatory patients.

Scores may vary according to the time of day, from morning to afternoon or evening. It is therefore useful to choose a time of day for rating and try to do all rating around that time.

A change of score of 2 points or more is statistically significant, however, the reason for this change may have to be carefully considered.

Rapid increases in scores, especially when they jump into the range above 10 or 12, are indicative of patients who are deteriorating quite rapidly and these particular patients should be given very close attention by clinical personnel.

It should be noted that these interpretations are based upon a population consisting of ambulatory confused patients diagnosed as suffering from Alzheimer's Disease or related disorders. Other forms of organic brain dysfunction and metabolic disturbances may produce confusional states and dementia-like symptoms yielding scores that may have to be interpreted in a somewhat different manner.

KINGSTON DEMENTIA RATING SCALE

IV - Chart Summary

Date	Rater	Orientation (1-10)	Emotional Control (11-12)	Language (13-15)	Items (18-21)	TOTAL (1-21)