### 4 Stage Dementia Scale

**Pre-clinical No Dementia**
- Verbal memory decline
- Also called Forgetfulness stage in 4 stage scheme
- **Forgetfulness**  - episodic memory, semantic memory, visuospatial functioning
- (More than 50% of patients displayed psychopathology)
- Patient frightened needs reassurance
- Patient in denial and withdraws, under stress gets lost, forgets address

**Stage 1 Mild Dementia**
- Lasts 1-3 years
- Participant can live at home with family caregiver and attend day care several days a week, for respite
- Memory impairment. Disorientation in time & place, restlessness and anxiety
- Memory impairment of recent events
- Meals or conversations details that day
- Spatial perception decline
- Topographical memory decline
- Impaired concentration & fatigue
- Restlessness & anxiety
- Fleeting depressions
- Exaggerations/changes in personality
- Wants familiar surroundings/people & only small groups

Patient increased anxiety over memory loss as patient tries to cope. Avoid behavior problems by creating less demanding situations & environment.

**Thinks like an 8-12 year old.**

### 7 Stage Dementia Scale (Global Deterioration Scale)

**Level 1 No cognitive decline, [i.e. Normal Adult]**
- No subjective complaints of memory deficit.
- No memory deficit evident in clinical interviews.

**Level 2 Very mild cognitive decline (forgetfulness).**
- Subjective complaints of memory deficit, frequently in the following areas: (a) forgetting where one has placed familiar objects; (b) forgetting names on formerly knew well.
- No objective evidence of memory deficit on clinical interview.
- No objective deficits in employment or social situations.
- Appropriate concern regarding symptoms.

**Level 3 Mild cognitive decline (Early Confusional).**
- Earliest clear-cut deficits.
- Manifestations in more than one of the following areas:
  - (a) patient may have gotten lost when traveling to an unfamiliar location; (b) co-workers become aware of patient's relatively low performance; (c) word and name finding defect becomes evident to intimates; (d) patient may read a passage of a book & retain relatively little material; (e) patient may demonstrate decreased facility in remembering names upon introduction to new people; (f) patient may have lost or misplaced an object of value; (g) concentration deficit may be evident on clinical testing.
- Objective evidence of memory deficit obtained only with an intensive interview. Denial begins to become manifest in patient. Mild to moderate anxiety accompanies symptoms

**Level 4 Moderate cognitive decline (Late Confusional).**
- Clear-cut deficit on careful clinical interview.
- Deficit manifest in following areas: (a) decreased knowledge of current and recent events; (b) may exhibit some deficit in memory of one's personal history; (c) concentration deficit elicited on serial subtractions; (d) decreased ability to travel, handle finances, etc.
- Frequently no deficit in the following areas: (a) orientation to time and person; (b) recognition of familiar persons and faces; (c) ability to travel to familiar locations.
- Inability to perform complex tasks. Denial is dominant defense mechanism. Flat personality and withdrawal from challenging situations

### Typical Behavior Problems

<table>
<thead>
<tr>
<th>% Dementia Patients having</th>
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<tbody>
<tr>
<td>Tearfulness</td>
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<tr>
<td>Suspiciousness or paranoia</td>
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<tr>
<td>Depression</td>
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<tr>
<td>Anxiety (future events)</td>
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<td>Verbal outbursts</td>
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<tr>
<td>Agitation</td>
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<tr>
<td>Day &amp; night sleep disturbance</td>
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**FOOTNOTES**

i. Howieson,D et al; Cognitive markers preceeding Alzheimers Disease in the healthy oldest old, JAGS, May 1997, V45 (5) PS84-S89
ii. Almkvist, O; Backman, L; Detection and Staging of clinical dementia; Acta-Neurologica, Scandinavica; 1993, Ju; V88 (1) P0-15
iii. Eisdorfer, C; Cohen, D; Paveza, G; Ashford; J et al; An empirical evaluation of Global Deterioration Scale for staging Alzheimer’s disease; American Journal of Psychiatry; 1992 Aug V149 (8) 1129
iv. Resiber, B; et al; New advances in understanding and Association National Meeting testing Alzheimer’s disease; 1997 Alzheimer’s
**4 Stage Dementia Scale**

**Stage 2 - Moderate Dementia**
- Family caregiver seeks more respite and days at day care
- Lasts 5-7 years
- Dysphasia, Apraxia, Agnosia
- Blunting of emotions and apathy
- Neurological signs
- Lack of judgement, abstract thought, calculation. Hallucinations, delusions

Denial continues + anger, suspicion & transient crying episodes. Family may attempt to push creating stress.

**Stage 3 - Severe Dementia**
- Family seeks full time care and/or housing. We provide Special Care
- Lasts 2-3 years
- Global cognitive decline
- Loss of personality
- Incontinence
- Gross disturbance of intellect
- Marked focal neurological deficits
- Slow, wide based unsteady gait
- Gross emotional disinhibition
- Former personality submerged
- Loss of face recognition
- Vegetative state reached
- Survive for years
- Wasting away despite appetite
- Death, usually by Pneumonia
- Must learn to interpret outbursts as communications of distress

**7 Stage Dementia Scale (Global Deterioration Scale)**

**Level 5 Moderately severe cognitive decline** (Early Dementia).
- Patient can no longer survive without some assistance.
- Patient is unable during interview to recall a major relevant aspect of their current lives, e.g., a) an address or telephone number of many years; b) names of close family members (such as grandchildren); c) the name of the high school or college they attended.
- Frequently some disorientation to time (date, day of week, season, etc.) or place. An educated person may have difficulty counting back from 40 by 4s or from 20 by 2s. Persons at this stage retain knowledge of many major facts regarding themselves and others. They invariably know their own names and generally know their spouse's and children's names. Require no assistance with toileting & eating, but may have difficulty choosing the proper clothing to wear.

**Level 6 Severe cognitive decline** (Middle Dementia).
- May occasionally forget the name of the spouse upon whom they are entirely dependent for survival. Will be largely unaware of all recent events and experiences in their lives. Retain some knowledge of their past lives but this is very sketchy. Generally unaware of their surroundings, the year, the season, etc. May have difficulty counting from 10, both backward and sometimes forward. Will require some assistance with activities of daily living, e.g., may become incontinent, will require travel assistance but occasionally will display ability to familiar locations. Diurnal rhythm frequently disturbed. Almost always recall their own name. Frequently continue to be able to distinguish familiar from unfamiliar persons in their environment. Personality and emotional changes occur.

*These are quite variable and include (a) delusional behavior, e.g., patients may accuse their spouse of being an impostor, may talk to imaginary figures in the environment, or to their own reflection in the mirror; (b) obsessive symptoms, e.g., person may continually repeat simple cleaning activities; (c) anxiety symptoms, agitation, and even previously nonexistent violent behavior may occur; (d) cognitive abulia, i.e., loss of willpower because an individual cannot carry a thought long enough to determine a purposeful course of action.*

**Level 7 Very severe cognitive decline** (Late Dementia)
- All verbal abilities are lost. Frequently there is no speech at all - only grunting. Incontinent of urine, requires assistance toileting and feeding. Lose basic psychomotor skills, e.g. ability to walk, sitting and head control. The brain appears to no longer be able to tell the body what to do. Generalized & cortical neurologic signs & symptoms are frequently present.

**Typical Behavior Problems**

- Purposeless activity .......................................................61%
- Suspiciousness & paranoia ...............................................57%
- Anxiety (upcoming events) .............................................46%
- People stealing things delusion .......................................43%
- Agitation (nonverbal anger/neg) ........................................43%
- Tearfulness ......................................................................43%
- Fear of being left alone ....................................................43%
- Day/night sleep disturbance ............................................43%
- Depressive mood/statement .............................................39%
- Inappropriate activities (rumage) ......................................39%
- General Anxieties .............................................................37%
- Wandering from home ....................................................36%
- Verbal outbursts .............................................................32%
- General delusions .............................................................32%
- Not my house delusion .....................................................29%
- Not my loved one delusion ................................................25%
- Feeling abandoned delusion .............................................25%
- Physical threat/violence ...................................................14%
- Auditory hallucinations ...................................................11%
- Spouse infidelity delusion .................................................7%
- Physical threat/violence ...................................................6%

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